VOCATIONAL NUMERACY - GENERAL
Skills Development Booklet

PREVIEW SAMPLE: DO NOT COPY

VPC Units 1&2: From 2023

⇨ Literacy VPC 1&2: Coursebook
& Applied Vocational Booklet
⇨ Numeracy VPC 1&2: Coursebook
& Skills Development Booklet
⇨ Personal Development VPC 1&2: Coursebook
& Applied Vocational Booklet
⇨ Work Related Skills VPC 1&2: Coursebook
& Applied Vocational Booklet

VCE: VM Units 1&2: From 2023

⇨ Literacy VM 1&2: Coursebook
& Applied Vocational Booklet
⇨ Numeracy VM 1&2: Coursebook
& Skills Development Booklet
⇨ Personal Development VM 1&2: Coursebook
& Applied Vocational Booklet
⇨ Work Related Skills VM 1&2: Coursebook
& Applied Vocational Booklet

VPC Units 3&4: From 2024

⇨ Literacy VPC 3&4 : Coursebook
& Applied Vocational Booklet
⇨ Numeracy VPC 3&4: Coursebook
& Skills Development Booklet
⇨ Personal Development VPC 3&4: Coursebook
& Applied Vocational Booklet
⇨ Work Related Skills VPC 3&4: Coursebook
& Applied Vocational Booklet

VCE: VM Units 3&4: From 2024

⇨ Literacy VM 3&4: Coursebook
& Applied Vocational Booklet
⇨ Numeracy VM 3&4: Coursebook
& Skills Development Booklet
⇨ Personal Development VM 3&4: Coursebook
& Applied Vocational Booklet
⇨ Work Related Skills VM 3&4: Coursebook
& Applied Vocational Booklet

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2024 DELIVER Education: Order form for Semester 2 2024. All prices are (GST inc.)

2024 VM & VPC

VCE: Vocational Major

--- All U1-4 now available ---	Printed Coursebook	Applied Vocational Booklet	Master license PDFs	e-version Master license PDFs
Literacy VM: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Numeracy VM: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Personal Development VM: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Work Related Skills VM: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Literacy VM: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Numeracy VM: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Personal Development VM: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Work Related Skills VM: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495

Vocational Pathways Certificate

--- All U1-4 now available ---	Printed Coursebook	Applied Vocational Booklet	Master license PDFs	e-version Master license PDFs
Literacy VPC: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Numeracy VPC: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Personal Development VPC: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Work Related Skills VPC: 3&4	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Literacy VPC: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Numeracy VPC: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Personal Development VPC: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495
Work Related Skills VPC: 1&2	___ @ $49.50	___ @ $27.50	___ @ $385	or ___ @ $495

Vocational and Work Education Resources

	Printed Book	e-version Master license PDFs
Vocational Numeracy General - SDB	___ @ $30	or ___ @ $165
Work Experience Journal	___ @ $22	or ___ @ $165
Work Placement Journal	___ @ $33	or ___ @ $220
PDS Planner: VPC 1&2	___ @ $33	or ___ @ $220
PDS Planner: VPC 1&2	___ @ $33	or ___ @ $220
PDS Planner: VM 1&2	___ @ $33	or ___ @ $220
PDS Planner: VM 3&4	___ @ $33	or ___ @ $220
Foundation Numeracy	___ @ $33	na
Senior Numeracy	___ @ $33	na

WACE: Career and Enterprise

Career and Enterprise	Printed Text	e-version
CAE: General 11 3ed for 2025	For 2025 (nya expected Nov '24)	
CAE: General 11 2ed (almost gone)	___ @ $60	or ___ @ $660
CAE: General 12/ATAR 11 2ed	___ @ $62	or ___ @ $660
CAE: ATAR 12 2ed	___ @ $68	or ___ @ $770
CAE: Foundation 11	___ @ $55	or ___ @ $595
CAE: Foundation 12	___ @ $55	or ___ @ $595

VCE: Industry and Enterprise

I&E Unit 1: Workplace Participation 5ed - book	___ @ $38
I&E Unit 1: Workplace Participation - e-master	___ @ $550
I&E 1&2: Towards an Enterprising You 6ed - book	___ @ $55
I&E 3&4: Towards an Enterprising Australia 5ed - book	___ @ $68

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--- New (Previews online) --- Money Matters 1: Cash transactions & orders

Master license only	____	$165.00
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Inc. Master license files, Money set, Printed book		
Print book only 1-4 copies	____	$33
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Total Amount (approx) $ _____

--- New: (Expected late Aug) --- Vocational Numeracy General: Skills Development Booklet
Print books, masters & e-version masters
--- Preview sample online ---

Order Details

Name:

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State: | Postcode:

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email for invoice (if different):

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Voc Ed Total $	CAE Total $	I&E Total $
Postage $		Total Amount (approx) $ _____

Progress Record   Name: Date:

#	Topic (Quick)	Due:	Done:	/20	Areas of strength:	Topic (Advanced)	Due:	Done:	/20	Areas to improve:	/40	%
1 pp. 2-3	Addition and Subtraction: Quick			/20		Addition and Subtraction: Advanced			/20		/40	%
2 pp. 4-5	Multiplication and Division: Quick			/20		Multiplication and Division: Advanced			/20		/40	%
3 pp. 6-7	Order of Operations: Quick			/20		Order of Operations: Advanced			/20		/40	%
4 pp. 8-9	Fractions and Decimals: Quick			/20		Fractions and Decimals: Advanced			/20		/40	%
5 pp. 10-11	Percentages: Quick			/20		Percentages: Advanced			/20		/40	%
6 pp. 12-13	Data and Information: Quick			/20		Data and Information: Advanced			/20		/40	%
7 pp. 14-15	Quantities and Measures: Quick			/20		Quantities and Measures: Advanced			/20		/40	%
8 pp. 16-17	Rates and Relationships: Quick			/20		Rates and Relationships: Advanced			/20		/40	%
9 pp. 18-19	Dollars and Sense: Quick			/20		Dollars and Sense: Advanced			/20		/40	%
10 pp. 20-21	Chance and Probability: Quick			/20		Chance and Probability: Advanced			/20		/40	%
11 pp. 22-23	Mixed Quiz: Quick			/20		Mixed Quiz: Advanced			/20		/40	%
12 pp. 24-25	Mixed Quiz: Quick			/20		Mixed Quiz: Advanced			/20		/40	%
13 pp. 26-27	Mixed Quiz: Quick			/20		Mixed Quiz: Advanced			/20		/40	%
14 pp. 28-29	Mixed Quiz: Quick			/20		Mixed Quiz: Advanced			/20		/40	%
15 pp. 30-31	Mixed Quiz: Quick			/20		Mixed Quiz: Advanced			/20		/40	%

Name: **Date:**

16 pp. 32-33	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
17 pp. 34-35	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
18 pp. 36-37	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
19 pp. 38-39	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
20 pp. 40-41	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
21 pp. 42-43	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
22 pp. 44-45	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
23 pp. 46-47	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
24 pp. 48-49	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
25 pp. 50-51	**Mixed Quiz: Quick**	Due:	Done:	**/20**	**Mixed Quiz: Advanced**	Due:	Done:	**/20**	**/40**
		Areas of strength:				Areas to improve:			**%**
26 pp. 52-53	**Mixed Quiz: Harder**	Due:	Done:	**/20**	**Pay Day**	Due:	Done:	**/45**	**/65**
		Areas of strength:				Areas to improve:			**%**
27 pp. 54-55	**Mixed Quiz: Harder**	Due:	Done:	**/20**	**Are We Typical?**	Due:	Done:	**/25**	**/45**
		Areas of strength:				Areas to improve:			**%**
28 pp. 56-57	**Mixed Quiz: Harder**	Due:	Done:	**/20**	**On The Road Again**	Due:	Done:	**/30**	**/50**
		Areas of strength:				Areas to improve:			**%**
29 pp. 58-59	**Mixed Quiz: Harder**	Due:	Done:	**/20**	**Another Day, Another $**	Due:	Done:	**/30**	**/50**
		Areas of strength:				Areas to improve:			**%**
30 pp. 60-61	**Mixed Quiz: Harder**	Due:	Done:	**/20**	**The Cook Off**	Due:	Done:	**/70**	**/90**
		Areas of strength:				Areas to improve:			**%**

Quick

1. What is 57 plus 48?	2. What is the sum of 23, 145 and 62?	3. Total of $175, $1,500 and $800.	4. Add 4.5 to 96.5.
5. What is sum of 50, -25 and 75?	6. Add sixty to 1,225.	7. Total of 4.5kg and 300 grams.	8. Subtract 32 from 89.
9. What is 178 minus 54?	10. Subtract $950 from $1,250.	11. Take away 12.25 from 58.5.	12. Subtract minus 15 from 40.
13. Take away thirty-five cents from 1,000 cents.	14. Subtract 250 ml from 3 litres.	15. Add 20 to 45, subtract 15, then subtract 5.	16. Take away 30 from 100, add 25, minus 10 and add 15.
17. Add $250 to $1,000, subtract $100, then subtract $75.	18. Subtract 3.5 from 20.5, add 5.3, subtract 2.1, then add 4.4.	19. Add 35 to -20, subtract 10, add 15, then minus 5.	20. Subtract 200 from 800, add 140, subtract 50, then add 75.

PREVIEW SAMPLE: DO NOT COPY

a. How much change from $20 for 7 cans of cola at $2.20 each, and a juice at $3?	b. If you add 2.5 litres to 1,400 ml and top up with 600 ml what is the total liquid volume in litres?	c. A courier run has 5 trips of 3km, 2 trips of 7.5km, and a final trip of 12.25km. What is the total distance?
d. If a company spends $45k on salaries, $15k on utilities and $10k on materials monthly, what are the total monthly expenses?	e. A farmer has 300 chickens, 200 ducks and 100 geese. If 50 chickens and 30 ducks are sold, how many birds are left on the farm?	f. A bakery uses 200g of sugar, 300g of flour and 150g of butter for a batch of cookies. If the recipe is tripled, how much of each ingredient is needed?
j. A bookstore has 120 fiction books, 95 non-fiction books and 50 children's books. If 30 fiction and 20 children's books are sold, how many books remain?	k. A school has 40 teachers, 30 administrative staff and 20 maintenance workers. If 5 teachers and 3 administrative staff retire, how many employees are left?	l. A sports team scores 75 points in the first half and 85 points in the second half of a game. If they lost by 20 points, what is their opponents final score?

h. A construction project requires 3 tonnes of sand, 2.5 tonnes of gravel, and 4.5 tonnes of cement. If the project is scaled up by 200%, how much of each material is needed in total?

Quick

1. Multiply 57 by 3.	2. What is 23 times 5?	3. Find the product of $175 and 4.	4. Multiply 4.5 by 6.
5. What is 50 times -2?	6. Multiply sixty by 20.	7. Find the product of 4.5kg and 2.	8. Divide 89 by 4.
9. What is 178 divided by 2?	10. Divide $1,250 by $50.	11. Divide 58.5 by 3.	12. Divide 40 by 0.5.
13. What is one thousand cents divided by 25?	14. Divide 3 litres by 0.25 litres.	15. Multiply 20 by 3, then divide by 2.	16. Divide 100 by 5, multiply by 4, then divide by 2.
17. Multiply $250 by 4, then divide by 10.	18. Divide 20.5 by 5, multiply by 3, then divide by 2.	19. Multiply -20 by 3, then divide by 2.	20. Divide 800 by 10, multiply by 3, then divide by 5.

a. A factory produces 500 units of a product each day. How many units are produced in 30 days?	b. A car travels at a speed of 80 kilometres per hour. How far will it travel in 5 hours?	c. A machine in a workshop can make 120 parts in an hour. How many parts can it make in 8 hours?
d. A construction crew can build 5 metres of road each day. How long will it take to build a 200m road?	e. If a printer prints 30 pages per minute, how many pages can it print in 3 hours?	f. A farmer collects 75 eggs each day. How many eggs are collected in a month of 30 days?
j. If a bus can carry passengers, how many buses are needed to transport 2,000 passengers?	k. A car's fuel tank holds 60 litres. The car consumes fuel at a rate of 8 litres/ 100km. How far can the car travel on a full tank?	l. If one packet of seeds covers 3 square metres and a garden is 45m^2, how many packets are needed to cover the garden?

h. A work contract for 2 plasterers will require 8 hours work per day over 4 days. If the pair is paid $600 per day, how much is earned by each worker in total, and how much does each worker earn per hour?

Quick

1. Add 57 to the result of 48 divided by 3, then subtract 10 times 2.	2. Multiply 23 by 2, add the result of 145 minus 45 divided by 5.	3. Add $175 to $1,500, divide the result by 5, then add $800 times 2.	4. Multiply 4 by the result of 96.5 minus 45.5, then add 10 divided by 2.
5. Add 50 to 25, multiply the result by 2, then subtract 75 divided by 3.	6. Add 60 to the result of 1,225 divided by 5, then subtract 100.	7. Multiply 4.5 by 1,000, divide the result by 300, then add 2.	8. Subtract 32 divided by 8 from 89, then add 15 times 3.
9. Calculate the result of 178 minus 54 by 2, then add 10 divided by 5.	10. Divide $1,250 by the sum of 50 and 100, then multiply by 3.	11. Divide 64 by the sum of 12.25 and 3.75, then multiply by 4.	12. Subtract 15 from 40, multiply the result by 2, then add 30 divided by 5.
13. Divide 1,000 by the sum of 35 and 5, then multiply by 10.	14. Multiply 3 by 1,000, divide the result by 250, then subtract 2.	15. Add 20 to the result of 45 times 2, then subtract 15 divided by 5.	16. Subtract 30 from 100, multiply by 3, then add 30 divided by 3.
17. Add $250 to $1,000, multiply by 2, then subtract 100 divided by 5.	18. Divide 21 by the result of 3.5 times 2, add 5.3 and subtract 2.1.	19. Subtract 20 from 35, multiply the result by 3, then add 15 divided by 5.	20. Divide 800 by the result of 200 by 2, add 140 and subtract 50.

a. A gym charges $20/ month for 6 months, then offers a $15 discount. How much does the membership cost for 6 months?

b. Four friends share 3 pizzas equally. How much pizza does each friend get?

c. A party planner bought 7 balloons at $3 each, then bought 2 packs of balloons containing 5 each. How many balloons in total?

d. A store sells 7 shirts for $15 each and gives a $20 discount for every 5 shirts purchased. How much does the store earn from selling the shirts?

e. A class sold 5 packs of cookies for $4 each, then used the money to buy markers costing $2 each. How much money did the class have left?

f. A group hiked 5km each day for 4 days, then hiked another 15km over the next 2 days. How many km did they hike in total?

j. A gamer scored 1? points in the 1st level, doubled his score in the 2nd level. He lost 6 points in the 3rd level. How many points did he have after the third level?

k. To mix paint, you need 1.25 litres of red paint, 2.5l of blue paint, and 0.75l of yellow paint. How many 500 ml cans do you need to pour the new colour?

l. Huot runs 4 km every day for 5 days, then swims 3 km on Saturday and 2 km on Sunday. How many km did she exercise in total?

h. Each student paid $10 for an excursion and $4 to contribute to the pizza lunch. If there were 3 classes of 20 students each, and the total cost of the trip and lunch was $600, how much does the school need to subsidise?

Quick

1. Add 3/4 and 1/2.	2. Subtract 3/6 from 3/4.	3. Multiply 2/5 by 3/8.	4. Divide 3/4 by 2/3.
5. Add 1/3, 1/2 and 3/4.	6. Subtract 7/8 from 5/4.	7. Find 2/3 of 5/6.	8. Add 2.5 and 1.75.
9. Subtract 3.6 from 8.2.	10. Multiply 4.3 by 0.5.	11. Divide 6.4 by 2.	12. Add 0.75, 0.25 and 1.5.
13. Subtract 3.9 from 5.2.	14. Calculate 3/4 of 17.5	15. Add 3/4 and then 1/2, to 2.5.	16. Subtract 1.25 from 3/2.
17. Multiply 1.5 by 3/4.	18. Divide 4.5 by 1/2.	19. Add 0.6 to 1/3, and then multiply the result by a half.	20. Subtract 7/8 from 3.875, then divide the result by a half.

a. A shop marks-up its chocolate blocks (cost $2.50) by 100%. What is the sale price?	b. Brucie gets a discount of 15% on his purchase of $180. How much is that?	c. A store buys an item for $80 and sells it for $120. What is the profit percentage?
d. Sarah deposits $5,000 in a bank account that earns 4% annual interest, What will be the total amount in her account after 1 year?	e. A city's population is 50,000. It grows by 5% in the first year and 7% in the second year. What is the population after two years?	f. A footballer increases their 10 disposals by 50% next game and another 50% the game after (compared to the start). What are these new amounts?
j. A sofa is priced at $900. It goes on sale for 20% off. During a promotion, an additional 5% is taken off the sale price. What is the final price of the sofa?	k. John's salary is $60,000. He gets a 5% raise in the first year and another 8% raise in the second year. What is his salary after two years?	l. A car's value decreases by 10% each year. If the car was worth $25,000 when it was new, what will it be worth after 3 years?

h. A factory produces 1,000 units of a product in January. In February, production increases by 20%, and in March, it increases by an additional 15% from February's production. How many units are produced in March?

Quick

1. What is 20% of 150?	2. Convert 3/5 to a percentage.	3. How much is $1,500 x 40%?	4. How much discount is 15% on an item priced at $200?
5. What is 65% of $2,000?	6. Calculate the sum of 20% of 50, and 30% of $150?	7. What is one hundred percent of zero?	8. If 5 people in a class of 25 barrack for Geelong, then what percentage don't?
9. If 40% of the 120 students are female, how many males are there?	10. A store offers a 15% discount. If an item originally cost $80, what is the discounted price?	11. An item originally priced at $120 is on sale with a 25% discount. What is the sale price?	12. If a $50 item has a mark-up of 50%, what is the selling price?
13. An electronic device originally cost $500. It is on sale for 15% off. What is the discounted price?	14. A store buys a product for $50 and marks it up by 40%. What is the selling price?	15. If a factory marks up the cost of production by 25%, and that cost is $400, what is the final price?	16. A retailer marks up the cost price of a shirt by 50%. If the cost price is $30, what is the selling price?
17. A jewellery store marks up its items by 35%. If a necklace's cost price is $500, what is the selling price?	18. If a product costs $80 before GST, what is the total cost including GST?	19. If you buy a laptop for $1,500 (GST inc.), how much GST did you pay?	20. If you buy a pair of sneakers for $300 plus GST, and these have been marked up by 100%, then what was their original cost to the seller?

a. In a class of 20 students, 30% passed with distinction. How many students passed with distinction?

b. A shop offers a 10% discount on all purchases above $50. If a customer buys items worth $70, what is the final amount they need to pay?

c. A store offers 30% off on shoes. If a pair of shoes is priced at $90, what is the discounted total price for a customer who buys 2 pairs?

d. A car dealership marks up its vehicles by 22.5%. If the dealership bought a car for $20,000, what is the selling price?

e. A restaurant bill totals $200, before GST. How much GST is to be added and how much is the final bill?

f. A café gives a free coffee after every 5 purchased as part of it loyalty scheme. What total discount is this?

j. A computer originally costs $1,200. It is marked up by 25% and then sold with a 15% discount. What is the final selling price?

k. A bookstore buys a novel for $10 and marks it up by 50%. If the GST rate is 10%, what is the selling price including GST?

l. A jacket originally priced at $120 is marked down for clearance by 20%, and a further 5% for club members. What is the sale price for a club member?

h. A $10,000 loan contract is set at 1% simple interest per month. The borrower pays off $1,000 off the loan at the end of the year. How much is owed at the end of the first year?

Quick

1. Find the mean of the following test scores: 85, 90, 75, 88, 92.	2. Calculate the median of the ages of five siblings: 10, 12, 9, 11, 13.	3. Determine the mode of the number of pets owned by five families: 2, 1, 3, 2, 2.	4. Compute the mean of the heights of six students: 160 cm, 155 cm, 165 cm, 158 cm and 162 cm.
5. Find the median of the number of books read by four students: 2, 5, 3, 4.	6. Determine the mode of the test scores of six students: 85, 90, 75, 88, 90, 92.	7. Calculate the mean of the weights of seven rissoles: 120 g, 130 g, 125 g, 115 g, 135 g, 140 g & 110 g.	8. Calculate the range of temperatures over seven days: 18°C, 20°C, 17°C, 22°C, 16°C, 21°C, 19°C.
9. If Jahoody earns $20/hour and works 8 hours a day, calculate her daily wage.	10. Determine Sally's weekly wage if they work 40 hours a week and earn $20/hour.	11. Calculate John's hourly wage if he earns $600 for working 20 hours.	12. Calculate the average cost of three items: $25, $30, $35.
13. Determine the average price of five shirts: $20, $18, $22, $25, $21.	14. Calculate the total duration of five movies: 90 minutes, 120 min, 105 min, 95 min and 110 min.	15. Determine the total time spent on four projects: 15 hours, 20 hours, 18 hours and 25 hours.	16. If the mean salary of a team of six employees is $50k per year, calculate the total annual salary of the team.
17. Determine the median age of a group of seven team members if their ages are: 18, 19, 17, 20, 18, 19, 16.	18. Calculate the mode of the number of goals scored by a soccer team in five matches: 2, 3, 1, 2, 4.	19. If the range of temperatures over seven days is 10°C, and the lowest temperature was 15°C, what was the highest temperature?	20. Determine the average duration of three songs if their lengths are: 3:10, 4:20 and 5:30.

a. Here is the sales information from YigBits Canteen for a Monday. Enter this data into the table and complete relevant totals.

Pies 23 @ $5, hotdogs 31 @ $4, vegie dogs 15 @ $4, hot chips 50 @ $4, egg sandwich 12 @ $5, vegemite sanger 12 @ $4, salad rolls 17 @ $6, tuna salad 9 @ $7, donuts 15 @ $3, cake slices 10 @ $4, chocolate bars 38 @ $3, potato crisps 20 @ $3, soft drink 31 @ $3, juice 14 @ $5, flavoured milk 14 @ $6, water 18 @ $2.

Item																
Price $																
Sales																
Total $																

b. Construct a properly-labelled pie chart to show the % category proportions based on total quantity sales of: hot food, cold food, snacks and drinks.

c. Construct a properly-labelled bar chart to show the total $ category sales based on hot food, cold food, snacks and drinks.

d. Construct a properly-labelled line graph to plot total daily sales over 5 days. Tuesday: sales down 10%. Wednesday up 15%, Thursday down 5%, Friday up 25%. (Note: percentages refer to previous day).

  13

Name: **Date:**

Quick

1. Convert 3 metres to centimetres and then add 150 cm.	2. Subtract 45 centimetres from 2.5 metres.	3. Multiply 1.2 metres by 100 to convert to centimetres.	4. Divide 3,600 cm by 6 to get equal lengths expressed in metres.
5. Add 2.5 kilometres to 1,500 metres.	6. Convert 500 grams to kilograms and then add 0.75 kilograms.	7. Subtract 0.25 kilograms from 1.8 kilograms.	8. Multiply 2.5 kg by 2 and then convert to grams.
9. Divide 1,500 grams by 5 and then convert to kilograms.	10. Add 750 grams 375 grams and 1.5 kilograms.	11. Convert 3 litres to millilitres and then add 500 millilitres.	12. Subtract 300 millilitres from 1.5 litres; and then top up 0.4 of a litre.
13. What is 0.75 litres plus 1.5 litres in millilitres?	14. Divide 4,800 millilitres into 6 equal amounts.	15. Add 1.2 litres to 750 millilitres.	16. If a recipe requires 250 grams of flour and 150 grams of sugar, how many grams of dry ingredients are needed in total?
17. Convert 400 millilitres of milk to litres and then add 0.25 litres of cream for a recipe.	18. How many litres is 24 cans of 375 millilitres?	19. If a cake recipe calls for 3 eggs and each egg weighs 60 grams, how many grams of eggs are needed in total?	20. Convert 1.5 kg of sugar to grams and then divide it equally into 3 batches.

a. A recipe requires 50 grams of butter, 0.3kg of melted chocolate, and 150 g of icing sugar. What is the total weight of these?

b. Marni bought 1.75 kg of apples, 2.5 kg of oranges and 650 grams of grapes. How many kilograms of fruit did she buy in total?

c. If a job requires 45 800cm lengths of timber, how many metres in timber in total?

d. A swimming pool is filled with 5.75 cubic metres of water. If 20% of the water evaporates, how much water is left in the pool?

e. If a water tank can hold 2,000 litres of water and it is filled at a rate of ... litres per hour, how long will it take to fill the tank?

f. A baker uses 250 grams of flour for one loaf of bread. How much flour is needed for 50 loaves?

j. What is the total length of cloth for 2 x ... mm, add 50mm each for ...ms, plus another 75mm each?

k. What is the total amount of sports drink in 8 x 500ml bottles, plus a 2.5 litre jug, less 500ml in spillage?

l. What is the average weight of a 15-player rugby team weighing 1,650kg?

h. A worker does these shifts: Monday 08:30 to 12:30; Tuesday 09:30 to 17:30 (w/45 minute break); Wednesday 10:30 to 8:30 (w/75 minutes of breaks); Friday 13:30 to 22.15 (w/45 minute break). What is the total time spent working?

Quick

1. A car travels at an average speed of 60 km/h. How far can it travel in 4 hours?	2. A train travels at 80 km/h. How long does it take to travel 320 kilometres?	3. A cyclist covers 15 km in 1 hour. What is their average speed in km/h?	4. A plane flies at 800 km/h. How long does it take to fly 2,400 kilometres?
5. A patient's heart rate is 80 beats per minute. How many beats does their heart make in 15 minutes?	6. If person takes 20 breaths per minute, how many breaths do they take in an hour?	7. If a car travels at an average speed of 60 km/h and a bike travels at 15 km/h, how much faster is the car in km/h?	8. If a recipe calls for 2 cups of flour and 1 cup of sugar, what is the ratio of flour to sugar?
9. If 1 cm on a map represents 25,000 cm in real life, what is the ratio of the map distance to the real distance?	10. If 50% of people have brown hair, what is the ratio of brown hair to the other hair colours?	11. If 1 cm on the map represents 1,000 kilometres in real life, what is the ratio of the map distance to the real distance?	12. A model of a building is 1:100 scale. If the real building is 50 metres tall, how tall is the model in cm?
13. If a recipe is scaled up by a factor of 3, and originally called for 2 cups of sugar, how much sugar is needed now?	14. If a recipe serves 4 people and requires 250 grams of rice, how much rice is needed to serve 12 people?	15. If a bike travels at an average speed of 24 km/h and an e-scooter at 12 km/h, how much faster is the bike compared to the e-scooter?	16. A business has a profit margin of 25%. If its revenue is $100,000, what is its profit?
17. If a bottle of medicine contains 120 ml and the dosage is 5 ml per dose, how many doses are in the bottle?	18. If a factory produces 500 units in 8 hours, what is its production rate in units per hour?	19. If a model car is designed at 76 times smaller than the real car, then what is the scale ratio of the model?	20. If a train travels at an average speed of 100 km/h and covers 300 kilometres, how long does it take to reach its destination?

a. A recipe calls for 1 kg of flour and 500 grams of butter. If you want to make twice the amount of the recipe, how much flour and butter do you need?	b. If the genders of a class are: 4 males, 6 females and 2 non-binary, then what is the ratio of males to females to non-binary?	c. A car travels 360 km at an average speed of 90 km/h. How long does it take to complete the journey?
d. A cafe has a total expense ratio of 75 cents for each dollar of sales. If its revenue is $200,000, how much is its profit?	e. If a packet of medication has 28 tables, and they are prescribed to be taken every 8 hours, how long before the prescription runs out?	f. A factory has a reject rate of 2% per day. If it makes 500 products, how many rejects would likely occur in a 5-day week?
j. A person runs at ___ km/h and walks at 5 km/h. If they cover a distance of 20 km in 3 hours, split evenly between walking and running, how much time did they spend running?	k. If 6 machines can produce 120 units of a product in 4 hours, how many machines are needed to produce 300 units in the same time?	l. The scale of a model house is 1:50. If a window on the model is 2 centimetres wide, how wide is the actual window?

h. A car commuter drives 5km to the CBD in peak hour and leaves at 8:30am. Average speed is 15km/h. A cyclist next door leaves for the same destination at 8:35am and travels at an average of 25km/h mainly on bike paths. Who gets there first?

9 Dollars and Sense

Name: **Date:**

Quick

1. Total $75.50, 24.99 and $15.	2. Total $2,500, 750 and $75.	3. Calculate $100 less $44.45 less $22.20.	4. What is 7 times $15.95?
5. What is $300 divided by 15?	6. How many cents are in $3.57?	7. How many dollars are in 1,465 cents?	8. In dollars, what is 88c + 99c + 111c + 12c?
9. A store sells a chair for $150 and a table for $250. If you buy both items, what is the total cost?	10. You receive a gift card with $100 on it and spend $55 and $18 twice. How much is left on the card?	11. Calculate the total cost if you buy a book priced at $15 each and 2 pens priced at $2 each.	12. You save 10% of your $500 monthly income. How much do you save each month?
13. A charity event raises $5,000 from ticket sales and $2,500 from donations. What is the total revenue?	14. If you buy an item for $25 and another for $12.95 and pay with a $50 note, how much change do you receive?	15. Zane earns $30 per hour and works 16 hours for the week. How much does he earn in a week?	16. Zane's 16 hours consist of 1 full time shift; and 2 equal casual shifts of how many hours?
17. How much is $3 x 5 plus $5.50 x 11?	18. If you buy 3 pizzas at $12 each and a drink for $4.50, how much change from a $50?	19. How much is $1 million x 1/2, plus $1 million by 1/4?	20. How much is an annual salary of $130,000 expressed per week?

a. If you spend $35 on groceries, $15 on petrol, and earn $50 from babysitting, what is your net gain or loss?	b. If a shirt costs $30 and is discounted by 20%, and you pay with a $50 bill, how much change should you receive?	c. Lalee earns $20 per hour and works 4 hours a day for 5 days. How much does she earn in a week?
d. Renovating a room costs $50 per m². If the room is 5 metres long and 4 metres wide, how much will it cost to renovate?	e. An excursion costs $30 per student. There are 25 students in one bus and 20 in other. How much does the excursion cost total?	f. The cost of making hotdogs is: dog 40c, roll 30c, cheese 10c, onions 10c & sauces 10c. What is cost of 20 dozen hotdogs?
j. Salavah earns $25 per hour as a hairdresser. How much is her weekly wage for a 40-hour week?	k. Jaycin is an apprentice and earns 90% of Salavah's wage. How much do they earn for a 40-hour week?	l. Lionel is an adult casual and earns 25% more than Salavah's wage. How much for 20-hours casual?
h. A factory packs 24 toys in a box. How many toys are in 75 boxes? The average wholesale price per toy is $2. What is the total wholesale value of the stock?		

Quick

1. What is the probability of tossing a head?	2. What is the probability of tossing a tail?	3. What is the probability of tossing a tail then a head?	4. What is the probability of tossing 3 heads in a row?
5. What is the probability of spinning a 6 on a 6-sided die?	6. What is the probability of spinning a 36 on a two 6-sided dice?	7. Which probability is higher: one in four, or one in two?	8. Which probability is higher: two in five, or two in three?
9. Which probability is higher: 9 out of 10, or 7 out of 8?	10. Which is an even chance? 3 in 6, or 4 in 7?	11. A jar contains 7 red marbles and 3 blue marbles. What is the probability of randomly selecting a red marble?	12. A bag contains 8 yellow balls and 4 green balls. What is the probability of randomly selecting a green ball?
13. In a deck of cards, what is the probability of drawing a heart?	14. In a deck of cards, what is the probability of drawing a two?	15. In a deck of cards, what is the probability of drawing the Ace of Spades?	16. Which has a lower probability? Flipping heads on a coin, or rolling a 5 on a 5-sided die.
17. A spinner is divided into 4 equal sections numbered 1 through 4. What is the probability of spinning three 3s in a row?	18. A box contains 10 chocolates, 5 of which are dark and 5 are milk. If you choose 2 chocolates, what are chances that both are dark?	19. What's a better chance? One in a million, or 1 in billion?	20. What's a better chance? Seeing a 'blue moon', or seeing Halley's Comet?

a. What is the probability of tossing a coin and getting 3 tails in a row?	b. What is the percent chance of tossing a coin and getting 4 tails in a row?	c. If you roll a fair six-sided die, what is the probability of rolling a number greater than 4?
d. A spinner is divided into 5 equal sections of red, blue, green, yellow and orange. What is the probability of landing on blue or red?	e. The probability of rain on any given day in a certain city is 20%. What is the chance it will not rain tomorrow?	f. If you roll a fair six-sided die, what is the probability of rolling a number less than 4?
g. A bag contains 4 red marbles, 3 blue marbles, and 5 green marbles. If a marble is drawn at random, what is the probability it is blue?	h. There are 5 white balls and 5 black balls in a bag. You draw 2 balls at random without replacement. What is the probability that both balls are black?	i. If you draw a card from a deck of 52 cards, replace it, and draw again, what is the probability of drawing a heart both times?

j. A pair of role-players needs to first roll a 7, and then the 2nd player needs to roll a 2 in order to beat the Dragon Master. Player 1 is using an 8-sided dice. Player 2 is using two 6-sided dice. What is the probability that they roll these 2 numbers and go on more adventures?

Name: **Date:**

Quick

1. If a journey takes from 10:30 to 11:17 what is the total duration?	2. What is the mean average of $22, $33, $55 and $55?	3. What is 15% of $40,000.	4. Convert 400 grams to kilograms.
5. How much will it cost to fill a 70 litre tank at $1.90 per litre?	6. What is 1.5 litres in millilitres?	7. If it takes a worker 20 minutes to assemble a flatpack table, then how long will it take to assemble 3?	8. Add 98, 45 and 102.
9. Find the median of $45, $60, $75, $90 and $105.	10. What is the total weight of 15 packages each weighing 4kg?	11. What is 2/3 plus 1/6?	12. If a general admission ticket is $90, and the price of a seat is 80% more, what is the seated price?
13. What is the median average of $700, $425, $680, $804 and $575?	14. How much will it cost to fill a 70 litre tank at $2.10 per litre?	15. How long is a trip from 12:45 to 1:30?	16. How much GST needs to be added to a GST exc. price of $150?
17. Which is a higher probability? A 1 in 2 chance, or a 1 in 3 chance?	18. How much is 330 minutes in hours?	19. If a $240 bill has to be split evenly 4 ways, then how much will each diner pay?	20. If a delivery takes 42 minutes and leaves at 2:33pm, when does it arrive?

a. If a group of 3 workers is paid $630 for a 3-hour job, how much does each worker get per hour?

b. If you add 2.5 litres to 1,400 ml and top up with 600 ml what is the total liquid volume in litres?

c. If a chef adds 2.5kg of mince to 600 grams, and then another 0.4 kg, what is the total in grams?

d. A courier run has 6 trips of 4km, 2 trips of 9.5km, and a final trip of 17.25km. What is the total distance?

e. How much change from $20 for 6 cans of cola at $2.20 each, and a juice at $3.

f. What is the total cost for a catered meal for 5 staff? Entrée = $10, main = $17, dessert = $12, drinks = $9.

g. What is the total perimeter of two rectangular fences that share a 4.5m side? One fence extends back 3m and the larger one extends back 6.5m.

h. If 6 coffees cost $40 and 4 of those were lattes at $6.50 each, how much did the other 2 coffees (which were long blacks) cost in total, and each?

i. If a worker starts at 08:30, has a 45 minute break from 12:15 to 13:00, and finishes the work day at 17:45, how many hours do they work in that day?

j. Tim works as a market delivery driver. His standard wage is $30 per hour. Overtime is paid at 50%. He also gets a 75% shift rate for half of his daily 8-hours to reflect his early start. How much does he earn for a 40-hour week plus 10 hours overtime?

12 Mixed Quiz

Name: **Date:**

Quick

1. How much GST needs to be added to a GST exc. price of $750?	2. How many litres are used per 100 km at a rate of 10 litres/100km?	3. An apprentice earns $26,000 per annum; so how much per week? (52 weeks)	4. What is 250 grams in kg?
5. If 5 cans of Boiks baked beans cost $10 in total, then how much will 7 cost?	6. Convert 4.2 metres to millimetres.	7. What is the sum of 90 + 110 + 45?	8. Convert 800 millimetres to metres.
9. A cashier's award pay rate is $30/hour. Casuals get 25% extra. How much extra is this?	10. What is 60 + 1_ x 9?	11. What is the area of a rectangle with s___s of 20cm x __cm?	12. How much in total for 5 bread loaves each @ $3.95?
13. Calculate 20 times $40.	14. What is the area of a triangle with a base of 10cm and a height of 15cm?	15. How many grams are in 3.75 kilograms?	16. Calculate the area of a circle with a radius of 8cm.
17. What is 12 times $0.35?	18. What is the circumference of a pizza with a diameter of 30cm?	19. What is the perimeter of a rectangle measuring 7m by 4m?	20. Calculate 14 times 25.

a. Calculate $25 times minus 10, plus $20 times 20.

b. A phone contract is $12.50 a week over 12 months. How much in total?

c. If a car travels 240 km in 4 hours, what is its average speed in km per hour?

d. A farmer has 220 hectares of land and wants to plant wheat on 1/5 of it. How many hectares will be used for wheat?

e. A shopkeeper sells an item for $120, making a profit of 20%. What was the cost price of the item?

f. A mocktail recipe requires 3 parts of juice to 2 parts of soda water. If you want to make 2 litres of the mocktail, how much juice and soda do you need?

g. If a runner completes 15km, takes a rest, runs another 10km, rests again, and runs all the way back, how much distance have they covered in total?

h. A theatre sells 120 tickets on Friday, 150 tickets on Saturday and 80 tickets on Sunday. If 30 tickets are refunded, how many tickets were sold in total?

i. A gardener planted 3 rows of flowers with 5 flowers in each row, then added 6 more flowers in another 3 rows. How many flowers did the gardener plant?

j. A workshop has 15 participants in the morning session and twice as many in the afternoon session. If 20% more participants join for the evening, how many participants are there in total?

13 Mixed Quiz

Name: Date:

Quick

1. A delivery takes 35 minutes total. If the courier leaves at 07:30 when do they get back?	2. How long is a work shift from 09:15 to 14:30 without breaks?	3. Find the sum of 7.5, 1.25 and 3.75.	4. What is 4 minus 2.5 plus 0.75?
5. If a bill of $360 is to be evenly divided among 6 people, how much does each pay?	6. Calculate 50 + 20 x 10.	7. Which is a higher price? A $150 item then discounted by 20%, or a $180 item discounted by 1/3?	8. Find the median of $50, $60, $70, $80 and $90.
9. Subtract 400 from one thousand and write your answer in numbers.	10. At what degree is 'Northwest' on a compass?	11. What is the perimeter of a rectangular yard measuring 4m x 3m?	12. Convert 500 grams to kilograms.
13. If a train travels at 80km/h for 120 minutes, how far does it travel?	14. How much change from a $52 purchase and a $34 purchase paid with a $100 bill?	15. How many litres are consumed for 200 km at a rate of 9 litres/100km?	16. What is the perimeter of a playing court measuring 24m x 20m?
17. What is the sum of 6.4, 3.6 and 8.2?	18. What is 2,250 ml in litres?	19. Which is a lower probability? A 2 in 6 chance, or a 1 in 5 chance?	20. What is the budget outcome with $1,600 revenue and $1,650 expenses?

a. Ninety-six divided by six plus twenty minus fifteen	b. A pump can move 500 litres of water in 10 minutes. What is the flow rate in litres per minute?	c. Sixty-three dollars minus $118, plus fifteen times four dollars.
d. To make lemonade, water is added to concentrate in a ratio of 4:1. If you have 2 litres of concentrate, how many litres of water should you add?	e. Lisa bought 8 packs of glitter for $2.75 each, then used a $5 loyalty reward. How much change did she get from $20?	f. A take-away uses 7.8 kg of potatoes each day for chips. How many kilograms are used in a 6 and a half day trading week?
g. A vinyl 'single' record plays at '45' revolutions per minute. How many revolutions for a song of 150 seconds?	h. A factory produces 300 ready meals each day. How many ready meals does it produce in 20 days?	i. If a car travels 240 kilometres in 3 hours, what is its average speed in kilometres per hour?

j. Miko bought 6 apples at $0.85 each, 3 oranges @ $1.10, 3 kiwifruit each at $1.25 and 3 punnets of raspberries at $5 each. How much did he spend in total? How much change from $50?

Quick

1. What is the result of multiplying 2,000 by $3.50?	2. What is 35% of $650?	3. Calculate the difference between 7.5 and 2.3.	4. How much will it cost to fill a 60 litre tank of diesel at $1.60 per litre?
5. Find the product of 300 and $2.50.	6. What is the cost to fill a 50 litre tank at $1.95 per litre?	7. Convert 360 minutes to hours.	8. Calculate 25% of $320.
9. If lunch includes a burger for $7, a shake for $2.50, and fries for $3, what is the total cost?	10. What is the amount of GST included in a price of $275?	11. What is the volume of a box with dimensions 30cm, 40cm and 50cm?	12. What is the area of a circle with a radius of 5cm?
13. Which is cheaper: a $70 item after a 25% discount, or a $90 item after a 40% discount?	14. How much change is needed for a $21.50 purchase paid with a $50 bill?	15. Calculate the earnings for 50 hours at $18 per hour.	16. What is 4.8 metres in millimetres?
17. What is the mode of the numbers 5, 7, 7, 9 & 10?	18. How much change would need to be given for a purchase of $66 and $22 from a $100 note?	19. Which is more likely: a 1 in 5 chance or a 1 in 10 chance?	20. How much GST is in a GST inc. price of $1,100?

a. A student scored 75, 80, 85 and 90 on four quizzes. What is the average score?

b. If a cyclist rides at a speed of 18 km/h, how long will it take to travel 36 kilometres?

c. Twenty-three plus 111 times eight divided by four.

d. A baker makes 50 loaves of bread, 40 cakes and 30 pies in a day. If it sells 40 loaves, 28 cakes & 18 pies; and donates 7 loaves and 10 cakes, how many baked goods are left?

e. A TV is initially priced at $1,200. It first goes on sale for 15% off, and then there is an additional 10% off the discounted price. What is the final price of the TV?

f. To make orange juice, water is added to concentrate in a ratio of 3:1. How many litres of water are needed to mix with 4 litres of concentrate?

g. A vinyl LP record plays at '33' revolutions per minute. How many revolutions for a song of 210 seconds?

h. Kaz budgets $400 per 4-weeks for groceries. If she spends $75 in each week, how much money does she have left in her grocery budget?

i. A sloth moves at a speed of 0.02 metres per second. How far does the sloth travel in 3 hours?

j. Each delivery, a courier spends 4 minutes getting in and out of the van and making the 'drop'. If they do 100 deliveries in 10 hours, how much time did they spend 'not driving' per day, and for a 5-day week?

Name:

Date:

Quick

1. What is 680 grams in kg?	2. How much total pay for 40 hours @ $32/hour?	3. At how many degrees is 'East' on a compass?	4. How much is 1 and a half hours in minutes?
5. How much GST is in a GST-inclusive price of $275?	6. Calculate the total pay for 25 hours of work at $19 per hour.	7. If 4 cans of paint cost $88 total, what is the cost for 5 cans?	8. Calculate the product of 15 and $12.
9. Express one fifth as a percentage.	10. Find the area of a rectangle with sides measuring 25cm by 30cm.	11. Calculate 2,000 times $1.50.	12. Convert 3.5 litres to millilitres.
13. What is 35% as a decimal?	14. Which probability is greater: 1 in 3 or 1 in 4?	15. How much is 180 minutes in hours?	16. What is the result of 1/4 + 3/2?
17. At how many degrees is 'North' on a compass?	18. What is $650 minus 5 x $40?	19. What is 1,500 ml in litres?	20. If a car travels at 50km/h for 30 minutes, how far has it travelled?

a. If the price of a product increases from $50 to $60, what is the percentage increase?

b. Eighty-five divided by five plus forty minus seven

c. If a pastrychef makes 360 cupcakes and packs them in boxes of 12, how many boxes are needed?

d. A term deposit of $10,000 earns 5% interest compounded annually. How much is in the account after 2 years?

e. A cyclist travels 12.5 km on the first day, 15.75 km on the second day, and 9 km on the third day. How many km in total?

f. A caryard has 40 sedans, 30 SUVs and 20 trucks. If 15 sedans and 10 SUVs are sold, how many vehicles remain in the inventory?

g. A store sells 15 bottles juice each hour at $150 each. How much in total juice sales over 10 hours?

h. A fruit juice is made by mixing oranges and apples in a ratio of 3:2. If you use 9 oranges, how many apples should you use?

i. The number of books read by students in a week is: 1, 2, 3, 4, 5, 5, 3, 2, 4, 3. What is the most frequent number of books read?

j. A person saves $500 in January, $600 in February and $400 in March. If they withdraw $200 in April and half as much again in May, how much money is saved in total?

Quick

1. A team of 5 workers is paid $400 for a 2-hour job. How much is each paid?	2. Calculate $800 less $175 less $40.	3. Find the area of a rectangle with sides measuring 35cm by 20cm.	4. Calculate 5 times ($80 plus twenty dollars).
5. What is 1/2 + 1/3?	6. Find the volume of a cube with a side length of 10cm.	7. What is one third as a percentage?	8. What is the volume of a packing box with dimensions 80cm, 20cm and 30cm?
9. Convert 750 millilitres to litres.	10. Subtract 125 twice from 600.	11. Which is less likely: a 3 in 6 chance or a 3 in 7 chance?	12. What is the total cost for 9 buns priced at $3.75 each?
13. What is 25% as a fraction?	14. What is the new price after a 15% discount on $80 shoes?	15. If a car travels at 50km/h for 90 minutes, how far has it travelled?	16. What is the result of 5/6 + 1/3?
17. If a meal includes a salad for $4, a sandwich for $5.50, and a drink for $2.50, what is the total cost?	18. What is the area of a rectangle with sides of 50cm x 25cm?	19. Calculate the area of a tabletop that measures 2.5m by 1.8m.	20. If dim sims are $1.50 each, or 4 for $5, what is the cost of 10 dimmies?

a. Six hundred and seventy-six minus 222 plus thirty times two.	b. A pizza is divided into 8 equal slices. If you eat 3 slices, what fraction of the pizza have you eaten?	c. If one textbook costs $44 (GST inc.) and a school needs 70 textbooks, how much will it cost in total?
d. In a survey of 1,000 people, 40% preferred tea, 35% preferred coffee, 15% preferred juice, and the rest preferred water. How many people preferred water?	e. An ice cream stand sells 20 ice creams per hour during peak hours and 10/hour non-peak. How many ice creams does it sell in a 8-hour day, if peak times runs for 2 hours?	f. If Taylor Swift's 2024 album, 'The Tortured Poets Department' sold 1.6 million units in the US on its first day, how many was this per hour?
g. A pizza restaurant sells 100 pizzas each day. If the restaurant operates for 5 days a week, how many pizzas does it sell in 4 weeks?	h. A pie chart shows the favourite fruits among 50 people as: 40% apples, 30% oranges, 20% bananas and 10% grapes. How many people prefer bananas?	i. A primary student buys 3 notebooks at $2 each, then buys 4 packs of pencils for $3 each. How much money did the student spend in total?

j. Diana read 3 of her grandpa's Phantom comics daily for 3 days, 4 on each of the next 2 days and 16 on the weekend. How many Phantom comics did she read for that week? If grandpa has 1,200 comics, at this rate, how long will it take Emma to read them all?

Quick

1. Subtract 700 from one thousand eight hundred, and write your answer in digits.	2. How much GST is in a GST inc. price of $220?	3. How much change is given for purchases of $47 and $36 paid with a $100 bill?	4. Write the amount three thousand and fifty-two dollars in numbers.
5. If a journey takes from 07:30 to 13:45 what is the total duration?	6. Which is more: 14% of $800 or 7% of $1,600?	7. Convert 2,500 millilitres to litres.	8. If a product has a cost of $80 and a mark-up of 50%, what is its price?
9. If a product has a cost of $50 and a mark-up of 100%, what is its price?	10. What is the tax amount for 12% of $700?	11. What is the volume of a packing box with dimensions 20cm, 30cm and 50cm?	12. What is budget result based on revenue of $2,900, and expenditure of $1,750 and $1,100?
13. Calculate $400 less $75 less $35.	14. A waiter is paid $28 per hour. So how much pay for 30 hours?	15. Find the mean of $9, $8, $10 and $11.	16. What is the total weight of 25 courier parcels each weighing 2.5 kg?
17. A $100 dress is discounted by 20%. What is the price after discount?	18. Multiply $7 by 1/5.	19. If a coat originally priced at $150 (including tax) is now $105, what is the discount?	20. If assembling a shoe rack takes 15 minutes, how long will it take to assemble 9 of them?

a. What is the total of twenty-five plus 70 times fifteen minus ten?	b. A snowboarder does a 180^0, a 360^0 and then a 270^0. How many revolutions have they made?	c. The test scores of a class are: 85, 92, 78, 85, 88. What is the mode?
d. A farmer has 200 cattle, 300 lambs, and 100 pigs. If 50 cattle and 30 pigs are sold, how many animals are left on the farm?	e. A city park has 500 trees, 200 benches, and 100 lamps. If 50 trees are cut down and 20 benches are removed, how many items are left in the park?	f. A solution is made by mixing two liquids in a ratio of 5:3. If you have 15 litres of the first liquid, how much of the second liquid should you add?
g. You need 200 grams of sugar, 300g of flour and 150g of butter for a batch of cookies. If the recipe is tripled, how much of each ingredient is needed?	h. A student scored 85, 78, 92 and 88 in four subjects. If the maximum score in each subject is 100, what is the average percentage score of the student?	i. A recipe requires 1.5 cups of mince, 2.25 of vegies, and 0.75 cups of rice. If you double the recipe, how many cups of each ingredient do you need?

j. A water-saving shower head reduces water flow to 9 litres per minute. How much water is saved during a 10-minute shower compared to a regular shower head that uses 15 litres per minute? How much is saved weekly for a shower a day each, for a family of 4?

Name: **Date:**

Quick

1. A lunch includes a roll for $6, a juice for $4 and a donut for $2. How much in change from $15?	2. What is one half as a percentage?	3. What is the circumference of a circle with a diameter of 10cm?	4. Which is higher? 10% of $2,000, or 15% of $1,500.
5. What is $750 minus 2 x $100?	6. What is the tax amount for 15% of $800?	7. Calculate 9 times 11.5.	8. If a group of 3 workers is paid $450 for a 3-hour job, how much does each worker earn per hour?
9. What is 1/2 + 1/4?	10. At what degree is 'South-West' on a compass?	11. It takes a worker 15 minutes to assemble a cabinet, then how many can they do in 4 hours?	12. What is 12% of $350?
13. How much GST should be added to a price of $185 (GST exc.)?	14. How much change would need to be given for a purchase of $37.75 from a $50 note?	15. Calculate the income tax amount for 15% of $500?	16. What is the total pay for 35 hours of work at $20 per hour?
17. What is the total pay for 30 hours of work at $16 per hour?	18. Which is higher? 10% of $1,000 or 5% of $2,200.	19. What is the area of a circle with a radius of 7cm?	20. Convert 5.6 metres to millimetres.

a. How much is thirty-six dollars times 4, divided by six dollars times twelve.

b. If a shower uses 15 litres of water per minute, how much water is used for a 12-minute shower?

c. A cyclist covers a distance of 72 km in 3 hours. What is the cyclist's average speed in km per hour?

d. Konan drinks three 600 ml smoothies a day, which include 300 ml of low-fat milk. How much milk does he consume from these in a week?

e. A retailer has two shops. Shop 1 sold 500 units and Shop 2 sold 600 units. Which shop had a higher sales volume, and by how much in %?

f. A store offers a 25% discount on all electronics. If a laptop originally costs $1,200, how much money do you save if you buy it with the discount?

g. An old Bing Crosby shellac record of 'White *Christmas*' plays at 78 revolutions per minute. How many revolutions for the song: duration = 3:02?

h. The weekly sales of a store are: $450, $500, $550, $600, $700 and $750. Calculate the mean weekly average for these sales.

i. A café sells 200 pies each day. What is the total revenue generated by the pies in 30 days, if each sells for $5?

j. A rectangular garden is 10 metres long and 4 metres wide. If a path of 2 metres is added to the length and 3 metres to the width, what is the new area of the garden? How much bigger in % is the new garden?

Quick

1. Which is a higher probability? A 1 in 4 chance, or a 1 in 6 chance?	2. What is the area of a lawn with dimensions of 6m x 4.5m?	3. Write the amount two thousand and seventy dollars in numbers.	4. Express 12.5% as a fraction.
5. Convert 1,800 millilitres to litres.	6. What is $800 minus 7 x $60?	7. If the base rate is $36/hour and temp staff get an additional 20%, how much extra is this?	8. What is the area of a circle with a radius of 12cm?
9. Express one quarter plus 1/8th, as a percentage.	10. If a $99.95 bill has to be split evenly 3 ways, then how much will each diner pay?	11. What is 10% of $450?	12. Which is cheaper: a $65 item after a 20% discount, or a $90 item after a 40% discount?
13. Express 35% as a decimal.	14. Multiply 55 by $25.	15. For a yearly salary of $93,600, what is the weekly average?	16. Convert 2.5 kilograms to grams.
17. Which probability is lesser: 2 in 7 or 4 in 9?	18. What is the total cost for 8 loaves of bread priced at $4.10 each?	19. Find the area of a rectangle with sides measuring 40cm by 15cm.	20. Find the mean of $12, $9, $11 and $10.

a. Mo's car uses 8.4 litres of fuel per 100 km. If he drives 250 km, how many litres of fuel does it use?

b. A train can travel at 180 kilometre/hour. How far will it travel in 5 hours at 3/4s of that speed?

c. A zoo has 20 lions, 75 meerkats, 10 kangaroos and 25 wombats. How many legs?

d. The scale of a map is 1:25,000. If two cities are 10 cms apart on the map, what is the actual distance between them in kms?

e. If a boat travels at a speed of 25 km/h, how long will it take to travel a distance of 100 kilometres?

f. Mak, a weightlifter, weighs 90kg and gains 5% of their mass each month for 3 months. What is their weight after 3 months?

g. An artist sells 25 paintings in January, 30 paintings in February, and 25 paintings in March. If 5 paintings are returned, how many paintings were sold in total?

h. A spinner is divided into 4 equal sections of red, yellow, blue and green. If the probability of landing on red is 0.25, what is the probability of landing on a non-red section?

i. The ages of a group of people are: 23, 27, 23, 30, 31, 23, 28, 27 and 30. What is the median average of these ages?

j. A burger shop sells 80 meat burgers and 20 vegie burgers per day. If the shop operates for 6 days a week, how many burgers does it sell in a month? (assuming 4 weeks)

Quick

1. If a trainee earns $31,200 per annum, what is the weekly wage? (52 weeks)	2. How many litres are used per 100 km at a consumption rate of 5 litres/100km?	3. What is 12 times 1/4?	4. How much change is given for a $52.75 purchase paid with a $100 bill?
5. Add 135, 60 and 105.	6. What is the volume of a cube with sides of 4cm?	7. Convert 1.75 hours to minutes.	8. What is the price after a 12% discount on $85 shoes?
9. What is the perimeter of a rectangle measuring 6m by 5m?	10. How much change would need to be given for a purchase of $77 and $11.50 from a $100 note?	11. If building a model car takes 12 minutes, how long would it take to build 10?	12. If a worker's hourly rate is $22 and they work 40 hours a week, what is their weekly pay?
13. What is the mean average of $12, $10, $8 and $6?	14. Calculate $650 minus $95 minus $30.	15. If a worker does a shift from 16:30 to 21:15 with no breaks, then what is the total time worked?	16. A plumber's pay rate is $40/hour. Overtime is 20% extra. How much in total is the wage for an overtime hour?
17. Write the amount seven thousand three hundred and fifty dollars in numerals.	18. Convert 45% to a decimal.	19. Find the total of 85 + 130 + 40.	20. What is 0.75 litres in cubic centimetres?

PREVIEW SAMPLE: DO NOT COPY

a. What is the sum of the whole numbers from 1 to 10?

b. How much is (eighty-seven plus 53) divided by two minus forty?

c. If one litre of paint covers 2m², how many litres are needed to paint a 8m² square room with 2 coats?

d. The heights of a team are: 150cm, 155cm, 160cm, 165cm, 170cm and 190cm. What is the range of heights?

e. If a rabbit's heart rate range averages 130-325 bpm (depending on activity), then on average, how many beats an hour?

f. If the probability of event A occurring is 0.4 and the probability of event B occurring is 0.3, what is the probability that both events A and B will occur?

g. A teacher buys 2.5 of ribbon, 3.75m of and 120cm of for a project. How many metres of materials did the teacher buy in total?

h. A family's monthly electricity bill averages $150. If they reduce their electricity usage by 15%, how much money do they save on their monthly bill?

i. Effie spends 1.5 hours homework on maths, 2.25 hours on science and 0.75 hours on economics. How many hours of homework in total?

j. A bookstore sells 50 books each day. How much revenue does the bookstore generate in 15 days if each book sells for $20? If the gross profit margin is 40% then how much is that in total?

Quick

1. What is 40% of $200?	2. Calculate the mean of $8, $9, $10 and $11.	3. If 3 boxes of cereal cost $18 in total, what is the cost for 8 boxes?	4. Find the circumference of a circle with a diameter of 20cm.
5. What is 5 minus 1.50 + 0.75?	6. A delivery takes 18 minutes each way. If the courier leaves at 3:30pm, when do they arrive back?	7. What is 2 minus 1.75 + 0.5?	8. What is 12.5% as a fraction?
9. What is 500 mm in metres?	10. If 8 cans of cola cost $20 in total, then will much will 5 cost?	11. Multiply 25 by 18.	12. If a team of 4 workers is paid $480 for a 2-hour job, how much does each worker get per hour?
13. Convert 2.25 litres to millilitres.	14. For an annual salary of $85,000, what is the weekly average?	15. Multiply $32 by 11.	16. What is the budget result of $1,700 revenue, against $750 expenses and 2 cost amounts of $500?
17. What is the combined weight of 20 packages each weighing 3.5 kg?	18. Divide 288 by 12.	19. Subtract 450 from one thousand five hundred, and write your answer in digits.	20. What is 2.4 metres in millimetres?

a. How much is (sixty divided by five) plus twelve times three?	b. How much is 12 cans of mineral water at $2.95 each?

c. A skater travels 10 km in 30 minutes. What is their average speed in metres per second?

d. A company sells a bed for $800 and makes a profit of 25%. What was the cost price of the bed?

e. Mork wants to save 20% of his monthly income of $2,500. How much money does he save each month?

f. An irrigation system dispenses 200 litres of water every 5 minutes. What is the flow rate in litres per minute?

g. If an elephant's heart rate range averages 25-35 bpm (depending on activity), then on average how many beats in an hour?

h. A pancake recipe needs 1 cup of flour for 6 pancakes. If you want to make 21 pancakes, how many cups of flour do you need?

i. In a survey of 200 people, 120 said they preferred chocolate ice cream. What % of the survey respondents preferred chocolate ice cream?

j. Every day, Jiggie buys a coffee on the way to work, one at morning tea, one at lunch time and 1 after work. If these are priced at $6 each, how many does Jiggie spend over a 48-week year? (Assume no absences.)

22 Mixed Quiz

Name: _____ **Date:** _____

Quick

1. How many hours are worked from 08:00 to 14:45 without breaks?	2. What is the cost to fill a 65-litre tank at $1.95 per litre?	3. Subtract 47.5 from one hundred, and write your answer in numbers.	4. What is 15% of $800?
5. What is 15% of $400.	6. What is 7 times 35?	7. A $50 pair of shoes is discounted by 20%. What is the price after discount?	8. A jacket, originally priced at $110 (GST inc.) is now $77. What is the discount?
9. A cook is paid $25 per hour. So how much pay for 40 hours?	10. If a car travels at 60km/h for 2 hours, how far has it travelled?	11. Calculate $450 minus $85 less $40.	12. Calculate 5 times 1/4.
13. Convert 540 minutes to hours.	14. A manager's salary is $104,000/year. How much does this average per week over a year.	15. Convert 6 kilograms to grams.	16. What is 800 mm in metres?
17. What is 6 times 1/3?	18. What is 3 minus 1.5 plus 1.25?	19. Convert 4.5 hours to minutes.	20. Express the amount three thousand six hundred and fifty dollars numerically.

a. How much is forty-two plus 353, minus eighteen times three?

b. 2 burgers @ $7.50, 2 fries @ $4 and 2 shakes @ $3. Change from $50?

c. If it takes a snail 20 minutes to move 4 metres, what is its average speed in metres/second?

d. A cyclist travels at a speed of 25 km/hour for 3 hours and 20 km/hr for 30 min. How far will they travel in 3.5 hours?

e. If 5 workers can build a house frame in 8 days, how many days would it take for 8 workers to build the same frame?

f. A gardener plants 30 roses, 25 tulips and 15 daisies. If they add 20 more roses and 10 more tulips, how many flowers are in the bed now?

g. A recipe requires 2 cups of sugar and 3 times as much flour. If an additional 4 cups of milk are added, how many cups of ingredients are needed in total?

h. The starting 5 for a netball team has an average height of 170cm. If you exclude the tallest player, Biggie Longshanks at 200cm, what is the average of the other 4?

i. A library has 3,000 books in English, 1,200 books in Italian and 800 books in Arabic. If they add 500 books in each language, what will be the new total number of books?

j. A store sells sports jerseys for $45 each and gives a 10% discount once 15 jerseys are purchased. How much does the store earn from selling 30 jerseys to one team? What about for a contract for a whole league of 12 teams?

Quick

1. How much is earned for 45 hours of work, at $22 per hour?	2. Which is more: 12% of $900, or 8% of $1,500?	3. If the standard rate is $48/hour and overtime pays an extra 30%, what is the total pay for an overtime hour?	4. Convert 600 millimetres to metres.
5. Find the median of $45, $55.50, $65, $80 and $95.	6. How much change is needed for a purchase of $17.35 from a $20 note?	7. If a cyclist travels at 30km/h for 20 minutes, how far does she travel?	8. Calculate the product of 70 and $20.
9. What is the area of a tabletop with dimensions of 2m x 1.5m?	10. Determine the sum of 6.2 + 1.8 + 3.15.	11. If a delivery takes 40 minutes and starts at 1:20, when does it arrive?	12. What is the sum of 9 + 2.25 + 3.75?
13. Compute 70 + 10 x 5.	14. How much is 45% of $300?	15. How long is a trip from 13:10 to 14:05?	16. What is 15% of $200?
17. Express 75% as a fraction.	18. What is the volume of a box with dimensions 25cm, 35cm and 45cm?	19. If a worker does a shift from 08:30 to 13:15 with no breaks, then what is the total time worked?	20. If dim sims are priced at $2 each or 3 for $5, then how much will 8 cost?

a. A runner completes a 400-metre in 50 seconds. What is their average speed in metres per second?	b. Each woodworker can build 4 chairs per day. How many chairs can 5 woodworkers build in 2 days?	c. If a model train is 1/32nd the size of the actual train, and the toy train is 12 centimetres long, how long is the actual train?
d. If a human's heart rate range averages 60-100 bpm (resting) then on average how many beats in an hour?	e. A birthday cake is cut into 8 equal pieces. If 5 cakes are ordered, how many pieces of cake are there in total?	f. If fifty Year 12 students average $120 on their formal outfits, how much is this in total dollars?
g. A batch of cookies uses 0.75 cups of chocolate chips, 0.5 cups of nuts, and 1.25 cups of oats. How many cups of ingredients in total for 2 batches?	h. A recipe calls for 3 cups of flour and 2 cups of sugar. If you use 4.5 cups of flour, how much sugar should you use to maintain the same ratio?	i. If Taylor Swift's 2024 album, '*The Tortured Poets Department*' sold 1.6 million units in the US on its first day, and 600,000 were on vinyl, what percentage were vinyl?

j. A workshop produces 150 chairs, 100 tables and 50 cabinets each month. If 20 chairs and 10 tables are damaged, how many items remain in good condition? If the cost of a chair was $120 in materials and labour, and for tables this was $150, then how much did they lose from this in $?

Quick

1. If a $500 bill is split equally among 4 people, how much does each person pay?	2. How many grams are in 5 kilograms?	3. How many litres are used for 50 km at a consumption rate of 7 litres/100km?	4. Calculate 15% of $1,200.
5. What is 18 kg in grams?	6. If a cyclist rides at 15km/h for 1.5 hours, how far does he travel?	7. What amount of GST should be added to a price of $175 (excluding GST)?	8. Calculate 50 times $30.
9. What is the budget result based on revenue of $2,900, and expenditure of $2,725?	10. How much total pay for 20 hours @ $18/hour?	11. Multiply 65 x 10 x 5.	12. Which is a lower probability? A 2 in 5 chance, or a 9 in 10 chance?
13. What is the sum of 700 + 1,100 + 90?	14. What is $750 minus 4 x $50.	15. A hairdresser's pay rate is $35/hour. Casuals get 25% extra. How much is earned in total?	16. What is 3 kg in grams?
17. Which is lower price? A $60 item discounted by 20%, or a $75 item to be discounted by 33%?	18. Calculate the income tax amount for 25% of $2,500?	19. How much is 2 and a half hours in minutes?	20. What is the mean average of $7, $6, $5 and $6?

PREVIEW SAMPLE: DO NOT COPY

a. Calculate one hundred and five divided by seven plus forty.	b. Change from $10 for 15 apples at $0.45 and 3 oranges @ 75c?	c. A café sells 150 cups of coffee each day. How many cups of coffee does it sell in 7 days?
d. A garden is divided into 4 equal parts. If one part of the garden is 150 square metres, what is the total area of the garden?	e. A vinyl LP record plays at '33' revolutions per minute. How many revolutions for a side of 22 minutes and 30 seconds?	f. If a model car is 1/24th the size of the actual car, and the model is 8 centimetres long, how long is the actual car?
g. A family's weekly petrol bill averages $150. If they switch to an EV and save 90%, how much would they save weekly (only on fuel costs).	h. If a painter uses 2 litres of red paint, 3.5 litres of blue, and 1.5 litres of yellow, and 2 x 1.25 tins of black for a mural, how much paint is used in total?	i. Cletus eats a Big Mac for morning tea and 2 for lunch every work day. How many does he eat for a 48-week year? (Assume no absences.)

j. Each salesperson at a store sells an average of 15 pairs of shoes per day. If there are 3 salespersons, how many pairs are sold in 5 days? If the average selling price of the pairs of shoes was $250, then how much was the total revenue?

25 Mixed Quiz

Name:

Date:

Quick

1. A $60 pair of pants is discounted by 15%. What is the price after the discount?	2. A jacket priced at $99 (GST inc) is on sale for $66. How much is the discount?	3. What is the sum of 14.5 + 2.5 + 2.25?	4. Calculate the area of a circle with a radius of 15cm.
5. What is 22% of $450?	6. A manager's salary is $76,000/year. How much does this average per week over a year.	7. If the base pay is $32/hour and casual employees get an additional 20%, how much extra is this?	8. What is 40% as a fraction?
9. How much in total for 5 burgers each @ $6.50?	10. If an item costs $75 and is marked up by 90%, what is its selling price?	11. Find the area of a tabletop that measures 4m by 5m.	12. A trainee manager earns $38,000 per annum; so how much per week? (52 weeks)
13. What is the total weight of 250 courier parcels each weighing 3 kg?	14. Calculate 1,000 times $2.50.	15. If potato cakes are priced at $1.50 each or 3 for $4, then how much will 10 cost?	16. If an intern earns $29,000 per year, what is the weekly earning? (52 weeks)
17. If the regular rate is $50/hour and overtime is 25% more, what is the total pay for an overtime hour?	18. If donuts are $1.25 each or 5 for $5, what is the cost of 12 doughnuts?	19. What is the perimeter of a square with a side length of 12cm?	20. What is 25% of $275.

a. If you run 3km a day for 5 days a week, then how many kms in 4 weeks?

b. How much larger in area is a square of 24cm² compared to a square of 4cm²?

c. How much is $1,000 in weekly revenue, less $85 in costs/day. over 7 days?

d. A family's grocery bill is $150. If inflation forces prices up by 4%, then what is the new cost?

e. How many slices of cheese are needed to make 64 simple triangle sandwiches (i.e. cut in 4).

f. A face painter can do a kid's face every 5 minutes. At a fete they work non-stop for 4 hours. How many faces painted?

g. If you sleep 7 hours a day on week nights and a night on weekends, what % of the week is spent sleeping?

h. Each salesperson at a boutique sells an average of 8 dresses per day. If there are 3 salespersons, how many items are sold in 10 days?

i. Jenza scored 8 points in the 1st quarter, then doubled his points in the 2nd. He added 4 points in the 3rd quarter and 2 points in the fourth quarter. How many points did he score in total?

j. Muzi in Year 12, has a casual retail job, normally works 10 hours/week and is paid $20 per hour, plus a 25% casual loading. She wants to save $5,000 in 12 months towards a car. She spends about $50 of her wages a week. How many weeks and hours on average, does she need to work to save this amount? (Ignore any tax amounts)

Quick (Harder)

1. A square garden has a perimeter of 36 metres. What is its area?	2. 18 divided by the difference between 6 and 2, plus five.	3. If a 5 litre container has 2 litres of water, how much capacity is remaining?	4. Convert 3.5 metres plus 2.7 metres into centimetres.
5. How many total points is an Aussie Rules score of 8.19?	6. How many kilograms are there in 500 grams, plus 10 times 200 grams?	7. A car travels 240 km on 30 litres of petrol. How far can it travel on 20 litres of petrol?	8. Find the sum of 3.5, 8.25 and 1.75.
9. A factory produces 500 units of a product per day. How many units will it produce in a week?	10. Calculate the sum of $27,400, $18,700 and $24,900, and then subtract $___.	11. If a recipe requires 2 cups of flour for every 5 cups of sugar, and you have 6 cups of sugar, how much flour is needed?	12. How many millimetres are there in 5.25 metres?
13. Calculate the mean of 8, 10, 12, 14 and 16.	14. Multiply 8 by 12 by 4 by 2.	15. If 8 workers can build a wall in 16 days, how many days will it take for 6 to build the same wall?	16. Twenty times the sum of 5 and 3, minus 10.
17. Subtract $25 from $1000, ten times.	18. A project's duration is 10 days working 8-hour days, but is completed in 8 days due to overtime. How many extra hours did the team work?	19. If a leaking tap loses 1 litre per hour how much does it leak in a day?	20. If a company's revenue increased by 25% this year and the revenue last year was $400,000, what is the revenue for this year?

These questions are based on the weekly pay of a local retailer. Wage rates are based on the national minimum wage for 2024/25 of $24.10, but you can use your current year's.

Then complete the table below for each worker, or a similar one using rows, or even a spreadsheet, and also calculate the total wages bill, the average weekly wage, and the average hourly wage.

a. Alma, 22, works 38 full-time ordinary hours.	b. Beti, 19, works 38 ordinary hours at 80% of the adult rate	c. Cynth, 38, a part-timer, works 16 ordinary hours.
d. Dok, 45 is a casual and works four 4-hour shifts with a 25% loading.	e. Eryk, 18, a 2nd year apprentice, gets 60% of the adult rate for their 38-hours.	f. Foo, 62, works overtime of 3 hours at a 50% loading, plus 38 ordinary hours.
g. Ghan, 24, works 8-hours on each weekend day, and gets a penalty loading of 25% for Saturday and 50% for Sunday.	h. Hal, 71, works five 4-hour causal shifts each day from Tuesday to Saturday.	i. Ilce, 16, a casual, gets 50% of the adult rate for 8-hours on Sunday (plus the Sunday and the casual loading).

j. Manager Jakx is paid 50% more than the minimum rate and works 38 ordinary hours Monday to Friday, with an hour of overtime each day (50% loading).

Employee						**Ghan**			
Ordinary hrs x Pay rate									
Loading									
Total									
Overtime hrs x Pay rate									
Loading									
Total									
Saturday hrs x Pay rate						8 x $24.10			
Loading						25%			
Total						$241			
Sunday hrs x Pay rate						8 x $24.10			
Loading						50%			
Total						$289.20			
Total wages						$530.20			
Total wages bill	$		Average wage per week	$			Average wage per hour	$	

Quick (Harder)

1. Divide 132 by 12 by 3.	2. Add $100 to $1,000, twenty times.	3. Find the product of 7 times 2 and then multiply by 3.	4. A car travels at 90 kilometres per hour. How far does it travel in a 3-hour trip for each of 3 days?
5. Multiply 12 by 13 and then times by 3.	6. A machine can produce 500 units in 8 hours. How many units can it produce in 20 hours?	7. Find the difference between 300 and 150, and subtract 50.	8. Calculate 500 minus 150 and then subtract 50.
9. The population of a town is currently 25,000 and is growing at a rate of 10% per year. What will the population be in 2 years?	10. A train travels a[t] an average speed of 90 km/h for 2 hou[rs] and then at 120km/h [for the] next 3 ho[urs]. What is the tot[al] [number]?	11. A comp[an]y's profit [ma]rg[in] is 20% of its [reve]ue. [I]f the revenue [is] [$]00,[000] what is the [pr]ofit [ma]rg[in] in dollars?	12. A swimming pool holds 50,000 litres of water. If it's filled evenly in 10 hours, how many litres of water are added per hour?
13. What is the square root of 25?	14. What is the sum of 1,100, 750, 2,000 and 450?	15. Multiply 6 by 10 by 3 by 20.	16. Solve for x in this equation. x = 25 * 50
17. Subtract 8.7 from 20, and then add 4.6.	18. If a cricket batter has made 200 runs and their average is 40, then how many innings have they batted in (exclude not-outs)?	19. Calculate the surface area of a cylinder with a radius of 5 cm and a height of 12 cm.	20. A car travels at an average of 60 km/h for the 1st half of a trip and 80 km/h for the 2nd half. If the total trip takes 2 hours, what is the total distance?

In Australia, the CPI (Consumer Price Index) that is used to calculate inflation is divided into 11 major groups. These are used to categorise and measure changes in the prices of goods and services that Australian households typically purchase. In 2024 these groups, and their relative weightings were:

Source: ABS, Annual weight update of the CPI and Living Cost Indexes, 24/04/2024

- Food & non-alcoholic beverages: 17.15%
- Alcohol and tobacco: 6.98%
- Clothing and footwear: 3.40%
- Housing: 21.74%
- Furnishings, household equipment & services: 8.43%
- Health: 6.43%
- Transport: 11.42%
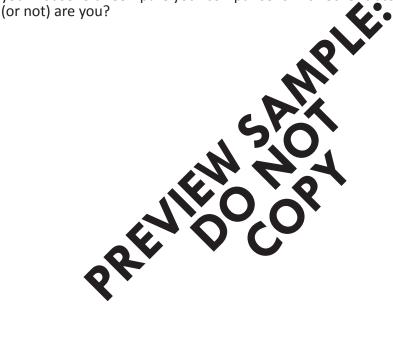- Communication: 2.14%
- Recreation and culture: 12.55%
- Education: 4.34%
- Insurance and financial services: 5.43%

a. Estimate and/or find out how much these relative percentages might be for your household.

b. Create a properly-labelled bar graph to compare the CPI percentages with those for your household. Compare your comparisons with other class members. How 'typical' (or not) are you?

Quick (Harder)

1. How much is 4^3?	2. If a rectangle has an area of 72 square metres and a length of 12 metres, what is its width?	3. Calculate 144 divided by 12, and then divide by 3.	4. Add 15.5, 7 and 3.2. Then subtract 4.1.
5. Divide 100 by 5, and then divide by 2.	6. The sum of three consecutive integers is 72. What are the integers?	7. Find the total of 425, 300, 150 and 75.	8. Add $25 to $100, twenty-five times.
9. A pizza restaurant offers a 15% discount on large pizzas, which are normally $20 each. If Trini buys 3 large pizzas, how much does she save?	10. A car rental company charges $40 per day plus $0.25 per km driven. If Kim rents the car for 3 days and drives 200 km, what is her total cost?	11. If it takes Jenka 2 hours to paint one coat on a fence, how long will it take her to paint a fence with 3 coats?	12. A delivery truck can carry 1,000 kg of goods. If it is loaded with 250 kilograms of goods, what fraction of its capacity is filled?
13. A tank can be filled by pipe A in 6 hours and by pipe B in 4 hours. If both pipes are opened together, how long will it take to fill the tank?	14. What is the square root of 125?	15. 3 workers stay back 2 hours every day for a week. If they normally work 8 hours a day, how many extra hours do they work in total?	16. How much is 2^3?
17. Subtract 200 from 800 and then subtract 100.	18. Multiply 6 by 3 and then multiply by 4.	19. Subtract $12,500 from $40,000, then add $22,700, and subtract $9,800.	20. A recipe calls for 250 ml of milk to make 5 servings. How many millilitres are needed for each serving?

Research and calculate the following for these journeys. Add 2 more of your own.

- ☐ distance
- ☐ travel mode
- ☐ travel time
- ☐ departure time (including travel to departure location and check-ins etc.)
- ☐ local arrival time
- ☐ cost

a. Home to Hobart	b. Home to Gold Coast
c. Home to Bali	d. Home to Paris
e.	f.

Quick (Harder)

1. Which is wider: a screen resolution: 1024 x 768 pixels, or 1920 x 1080 pixels?	2. A company sells 1,200 units of a product per month at $5 each. How much revenue is earned in a year?	3. Solve for x in this equation. $100 = 2x + 50$	4. If 5 painters can paint a room in 4 hours, how many painters are needed to paint the same room in 2 hours?
5. Subtract $11,000 from $50,000, then add $28,500, and subtract $7,200.	6. Find the quotient of 210 divided by 7, and then divide by 5.	7. An employee earns $20/ hour but $30/ hour for overtime. If they work 10 hours of overtime in a week, how much extra money did they earn?	8. Which is a larger ratio: 16:9 or 4:3; and what are the fractions?
9. Calculate 3 times 4 and then multiply by 5.	10. If a cricket bowler has conceded 64 runs and their average is 16, then how many wickets have they taken?	11. How many total points is an Aussie Rules score of 21.16?	12. Calculate the total amount after adding $25,000, $15,500, $30,200 and $18,300.
13. Solve for x in this equation. $30 = x + 20$	14. Subtract 120 from 400 and then subtract 80 twice.	15. What is the total of the consecutive whole numbers from 1 to 15?	16. The product of 7 and 3, minus five times 1.5.
17. Subtract $20 from $10,000, fifty times.	18. What is the sum of 280, 150, 180 and -90?	19. Add 12.3, 9 and 2.5. Then subtract 6.8.	20. Multiply 10 by 5 and then multiply by $2.50.

Lanny, 18, is about to start an apprenticeship as a carpenter. His boss will pay him at 60% of the adult pay rate of $30.

He is buying a used manual ute from a dealer for $15K. He will need to borrow $10k to help fund this. The ute has a RWC, has 6 months rego, and is mechanically sound.

Lanny estimates he will average 80km a day for work and TAFE (trade school).

Estimate, research and calculate the following amounts.

a. Which ute can he get? Why should he choose this? What is the fuel economy?

b. Loan duration, interest rate & repayments.

c. Rego and insurance.

PREVIEW SAMPLE: DO NOT COPY

d. Fuel costs.

e. Maintenance and repair costs.

f. Other vehicle costs

g. Calculate Lanny's total commitment per week, per fortnight, and per year.

h. What proportion of his wages will be spent on his vehicle (ignore his personal use for this)? Is there any funding or support to help Lanny?

Quick (Harder)

1. How many degrees is two complete revolutions?	2. A cyclist covers 80 km in 4 hours. What is the average speed in kilometres per hour?	3. If a person jogs at a speed of 12 km/hour over 2 hours, with two 10-minute breaks, how many kilometres have they travelled?	4. If an F1 car does a lap time of 180 seconds as a warm up and then does another in 162 seconds, how much faster is this in percent?
5. Divide 10,000 by 50 by 10 by 2.	6. If you have 750 grams of flour and you need 4 equal portions, how many grams are in each portion?	7. If Ralph can prepare 4 cakes in an hour, how many cakes can he prepare in 5 hours?	8. What is the sum of 125, 75, 150 and 200?
9. Divide 81 by 9, and then divide by 3.	10. A rope is 12.8 ~~metres long. If it is cut into 4 equal pieces, how long is each piece in~~	11. 24 divided by 3, plus the product of five and two.	12. A sum of money is divided among Chak and Chyl in the ratio 3:5. If Chak receives $600, what is the total amount?
13. Add $14,600, $19,200 and $17,800, then subtract $8,500.	14. How many total points is an Aussie Rules score of 10.10?	15. 15 minus the product of 4 and 2, plus 28.	16. What is the total of the consecutive numbers from 1 to 10?
17. If a cricket bowler has conceded 88 runs and their average is 44, then how many wickets have they taken?	18. Solve for x in this equation. (y = 10) x = 2y + 80	19. A café sells 300 coffees daily at $5 each. How much revenue is earned in a trading week of 6 days?	20. What is the perimeter of a right-triangled water feature with sides measuring 9 cm and 12 cm?

Meal Planner

Complete this planner for your 'go-to' meal for that you would make for a dinner for 4.

Description:		Serving Size:	

Ingredients:	Quantities:	Price per qty:	Total Price:
Main:			
Support:			

Cooking Equipment:		Utensils:	

Preparation Steps:	Time:

Cooking Steps:	Time:

Other Information/Special Requirements:	Nutritional Information per serve
	kJ
	Fat
	Carbs
	Protein

Total: Time - Prep	Total: Time - Cooking	Total: Cost - Ingredients	Total: Cost - Per serve