

Sample Exam 4 – Solutions

Session 4

Total: 75 marks

[1]

SECTION I

1. Write in words, the number represented in the place value chart below.

Hundreds of	Tens of	Thousand	Hundred	Tens	
Thousands	Thousands	Thousand	nunureu		
5	1	7	0	8 4	

Answer_____ Five hundred and seventeen thousand and eighty-four _

2. The number 946 is decreased by 381. What is the new number?

[1]

- 946
- 381

565

Answer_____

3. Using the digits 1, 2 and 7, form the smallest number which is a multiple of 4. [1]

127 is not divisible by 4 without having a remaining therefore it is not a multiple of 4. As a result, the smallest number which can be formed that is a multiple of 4 is 172.

565



4. Calculate 3.26×0.04

There are 4 total decimal places in both numbers.

Ignore the decimal places and complete the multiplication as if operating on two integers.



Rewrite the product with 4 total decimal places.

Answer______0.1304 ____

5. Write the missing number in the box below to make the statement correct.

[1]





6. Arrange the following decimal fractions in descending order.

0.31 0.13 1.3 1.03

Answer______¹/₉

[1]

Descending order means from largest to smallest in magnitude.

	Ones	Tenths	Hundredths	
	0	3	1	
	0	1	3	
	1	3	0	
	1	0	3	
	1.3 has 1 ones and 3 tent	hs		
	1.03 has 1 ones and 3 hu	ndredths		
	0.31 has 3 tenths and 1 h	undredths		
	0.13 has 1 tenth and 3 hu	indredths		
7.	[1]			



8. Aydon has 9 bills in his wallet with a total value of \$107.

\$5	\$1	\$50
\$20	\$1	\$10
\$5	\$10	\$5

Write the missing values in the 2 bills above.

Total value of 9 bills = \$107

Value of known bills = \$5 + \$1 + \$50 + \$20 + \$1 + \$10 + \$5 = \$92

Value of unknown bills = \$107 – \$92 = \$15

Therefore, the unknown bills are a \$5 and a \$10 note.

9. If $\frac{7}{12}$ of a number is 56, what is the number?

[1]



Answer______96 _____



10. Four boxes of doughnuts were bought to distribute between the three Standard 5 classes.If each box contained 1 dozen doughnuts, how much doughnuts did each class receive? [1]

1 box = 1 dozen doughnuts = 12 doughnuts

4 boxes = 4×12

= 48 doughnuts

Number of Standard 5 classes = 3

Number of doughnuts each class received = $\frac{\text{Total number of doughnuts}}{\text{Number of classes}}$

 $=\frac{48}{3}$

= 16 doughnuts

Answer_____16____doughnuts



11. Point *A* is 3.7 cm to the left of Point *B*. Draw an arrow to show the position of Point *A*. [1]



Therefore 3.65 hours = 180 mins + 39 mins

= 219 mins



13. An incomplete calendar is given below.

AUGUST							
Sun	Mon	Tues	Wed	Thur	Fri	Sat	
	1	2	3	4	5	6	
7	8	9	10	11	12	13	
14	15	16	17	18	19	20	
21	22	23	24	25	26	27	
28	29	30	31	1	2	3	

What day of the week is the 3rd of September?

[1]

August has 31 days.

The 3rd of September is a Saturday.

Answer_____Saturday



14. The objects shown below balance the scale. What is the mass of each pineapple?

[1]





15. Circle the solid that does **not** have a uniform cross-section.





16. The diagram below shows three angles. **AB** is a straight line.





17. The area of a square is 256 cm^2 . Calculate the length of ONE of its sides.

Area of square $= 256 \text{ cm}^2$

Length of one side =
$$\sqrt{\text{Area of square}}$$

= $\sqrt{256}$
= 16 cm
Answer_____16____cm

18. The tally chart below shows the favourite movie of a class of 30 students.

Movie	Number of Students		
Jurassic World	M II		
Spiderman 3 🌰			
Minions: The Rise of Gru	M IIII		
Avengers: Endgame	III III		

Name the movie that represents the mode.

[1]

Modal means the one that occurs most often.

Based on the tally chart above, Avengers: Endgame represents the mode since the it was the favourite movie of the largest number of students.

Answer_____ Avengers: Endgame _____



19. The mean of 7, 9 and 11 is the same as the mean of 13 and *a*.What number does *a* represent?

Sum of 7, 9 and 11 = 7 + 9 + 11= 27

Mean of 7, 9 and $11 = \frac{\text{Sum of 7,9 and } 11}{3}$ = $\frac{27}{3}$ = 9

Mean of 7, 9 and 11 = Mean of 13 and **a** Mean of 13 and **a** = 9

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13 + a = (Mean of 13 and a) × 2
= (Mean of 13 and a) × 2
= 9 × 2
= 18
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5

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a = 18 - 13
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= 5

Answer



20. The pictograph below shows the preferred breakfast of 56 students.





[2]

SECTION II

21. Siam puts three numbers in descending order.

A common fraction belonging to the eighths family is missing. Write the missing fraction.

> 50% 0.35

e eighths family.		\rightarrow \checkmark
		K A
Decimal	Percentage	
0.125	12.5%	
0.25	25%	
0.375	37.5%	
0.50	50%	
0.625	62.5%	
0.75	75%	
0.875	87.5%	
1.00	100%	
	e eighths family. Decimal 0.125 0.25 0.375 0.50 0.625 0.75 0.875 1.00	e eighths family. Decimal Percentage 0.125 12.5% 0.25 25% 0.375 37.5% 0.50 50% 0.625 62.5% 0.75 75% 0.875 87.5% 1.00 100%

It can be seen that the fraction which is less than 50% but greater than 0.35 is $\frac{3}{8}$.

3 8 Answer_____

22. Which two square numbers sum to 80?

The square numbers less than 80 include:



Answer_____2 $\frac{3}{4}$ _____

THE STUDENT **HUB**

[2]



24. For every \$15.00 that Kimani saves, her cousin, Kyle saves \$18.00. At the end of three months, Kyle saved \$126.00. How much did Kimani save in the same time? [2]





25. A school has 189 boys and 252 girls. If 9 girls are added to the school, what percentage of the school will be girls?

Initial number of girls in school = 252 girls Final number of girls in school = 252 + 9= 261 girls

Initial number of students in school = 189 + 252 = 441 students

Final number of students in school = 441 + 9

= 450 students

261

Percentage of the school that will be girls = $\frac{\text{Final number of girls in school}}{\text{Final number of students in school}} \times 100$





26. The public library in San Fernando charges \$2.50 per book per day for returning books late. Halley paid \$50.00 for returning 5 books late. The books were all borrowed on the same day. Calculate the number of days the books were overdue.





27. Complete the shape using *PQ* as the line of symmetry.





28. Celine used 17 m of cloth to make shirts and pants for her son. She used 92 cm of cloth to make each pair of pants and 60 cm of cloth to make each shirt. She made an equal number of pants and shirts. If she has 28 cm remaining, how many pants and shirts did she make? [3]

Total length of cloth = 17 m= 1700 cm

Remaining cloth = 28 cm

Length of cloth that was used = 1700 - 28

= 1672 cm

Length of cloth needed to make BOTH a pair of pants and a shirt = 92 + 60

1672 152

Number of pants and shirts made = $\frac{\text{Length of cloth that was used}}{\text{Length of cloth needed to make BOTH a pair of pants and a shirt}}$

= 11 pairs of pants and 11 shirts

152 cm

Answer______11 pairs of pants and 11 shirts ______



29. The signs below were displayed by two market vendors.





- 30. Atiya left work at the time shown on the clock below. She arrived at home 35 minutes later.
 - (a) On the same clock, draw the new position of the minute hand when she arrived at home.



The time shown on the clock is 6:25. Time Atiya arrived home = 6:25 + 0:35= 7:00

(b) Through what angle did the minute hand turn?

[2]

A circle has 360°.

The circle is divided equally into twelve angles at the centre. Angle between any 2 numbers next to each other $=\frac{360^{\circ}}{12}$ $= 30^{\circ}$

The number of 30° angles between 5 and 12 on the clock above is 7.

Therefore, angle the minute hand turned = $30^{\circ} \times 7$

= 210°

Answer______210 ______ degrees



31. Crissa bought an iPad for \$3000 and later resold it to Shinia for \$3550.

(a) What was the percentage profit on the sale?

[2]

Cost Price of iPad = \$3000
Selling Price of iPad = \$3550
Profit = Selling Price - Cost Price
= \$3550 - \$3000
= \$550
Percentage profit =
$$\frac{\text{Profit}}{\text{Cost Price}} \times 100$$

= $\frac{550}{3000} \times 100$
= $18\frac{1}{3}\%$
Answer______18\frac{1}{3} %
(b) If Shinia negotiated a discount of 20%, calculate the value of the discount she received. [1]

Value of discount = $\frac{20}{100} \times 3550 = \$710

Answer \$______710 _____



32. What is the area of the shaded figure?





[2]

33. Faith and her 5 cousins decided to go to MovieTowne. Each cousin spent \$50.00 on a movie ticket.They met 3 friends and bought popcorn for everyone at \$12.50 each.

What was the total amount of money spent?

Number of movie tickets bought = Faith + 5 cousins

= 1 + 5

= 6 movie tickets

One movie ticket cost \$50.00.

Cost of 6 movie tickets = $6 \times 50.00

= \$300.00

Number of popcorns bought = 6 + 3

= 9 popcorns

One popcorn cost \$12.50.

Cost of 9 popcorns = $9 \times 12.50

= \$112.50

Total amount of money spent = \$300.00 + \$112.50

= \$412.50

Answer \$______412.50 _____



34. The diagram below shows a bottle of flu medication and a dosage cup.



Jonathon was instructed by his doctor to take 3 doses per day for 5 days.

If each dose is 15ml, how many millilitres of the flu medication was there remaining in the bottle

after the 5 days had elapsed?

[2]

Volume of flu medication in bottle = 0.28 L = 280 ml

Volume of each dose = 15 ml Number of doses per day = 3 Number of doses taken in 5 days = 3×5

= 15 doses

Volume of 15 doses taken in 5 days = Volume of each dose × 15

$$= 15 \times 15$$
$$= 225 \text{ ml}$$

Volume of flu medication remaining in the bottle = 280 - 225

= 55 ml

Answer_____55 _____ millilitres



35. Complete the table below.

Solid	Number of Faces	Number of Edges	Number of Vertices
Cylinder	3	2	0
Sphere	1	0	0
Triangular Prism	5	9	6



36. Rainfall was recorded in Trinidad for 5 days as shown in the table below.

Day	1	2	3	4	5
Rainfall (mm)	225	190	240	235	205

If the average rainfall was 220 mm at the end of day 6, how many millimetres of rain fell on Day 6? [3]

Average rainfall at end of Day 6 = 220 mm

Total rainfall for 6 days = Average rainfall at end of Day 6×6

 $= 220 \times 6$

= 1320 mm

Total rainfall for 5 days = 225 + 190 + 240 + 235 + 205

= 1095 mm

Therefore, Day 6 rainfall = Total rainfall for 6 days – Total rainfall for 5 days

= 1320 - 1095

= 225 mm

Answer_____ 225 _____ mm



SECTION III

37. Malachi has 50% of the amount of Roblox points Yeriel has, and Matthew has $\frac{2}{5}$ of the amount of Roblox points Malachi has. If Yeriel has 2248 more Roblox points than Matthew, how many Roblox points does Malachi have? [4]





- 38. In ONE day Patricia's bakery produces 45 loaves of bread, while Jamie's bakery produces 12 **more** loaves of bread than Patricia's bakery.
 - (a) How many loaves of bread did BOTH bakeries produce in one day? [1]

No. of loaves produced by Patricia's bakery in one day = 45 loaves

No. of loaves produced by Jamie's bakery in one day = 45 + 12= 57 loaves

No. of loaves BOTH bakeries produced in 1 day = 45 + 57

= 102 loaves

Answer_____loaves of bread

(b) Both bakeries operate 6 days per week. How many more loaves of bread were produced by Jamie's bakery than by Patricia's bakery in 1 week?

No. of days in 1 week = 6 days

No. of loaves produced by Patricia's bakery in 1 day = 45 loaves No. of loaves produced by Patricia's bakery in 6 days = 45×6

= 270 loaves

No. of loaves produced by Jamie's bakery in 1 day = 57 loaves No. of loaves produced by Jamie's bakery in 6 days = 57×6

= 342 loaves

Difference = 342 - 270

= 72 loaves

Answer_____72 _____loaves of bread



(c) Both bakeries produced a total of 816 loaves of bread. How many days did it take them to do so?

No. of loaves BOTH bakeries produce in 1 day = 102 loaves No. of days taken to produce 816 loaves = $\frac{816}{100}$	
No. of days taken to produce 816 loaves $=\frac{816}{100}$	
102	
= 8 days	
Answer8days	



39. The diagram below shows a garden with a 2 m wide path.





Area of enclosed garden = $Length \times Width$

$$= 19 \times 16$$

 $= 304 \text{ m}^2$

Area of garden = Length \times Width

$$= 15 \times 12$$

 $= 180 \text{ m}^2$

Area of path = Area of enclosed garden – Area of garden

 $= 304 \text{ m}^2 - 180 \text{ m}^2$

 $= 124 \text{ m}^2$

Answer_____124 m²



PEN SALE

40.





(b) How many pens did he get altogether for his \$120.00?

