SECTION I

1. Write the numeral 91 005 in words.

Tens of Thousands	Thousand	Hundred	Tens	Ones
9	1	0	0	5

Answer_____ Ninety-one thousand and five _____

2. Arrange the numbers below in **descending** order.

3162   3612   3216   3126

Thousand	Hundred	Tens	Ones
3	1	6	2
3	6	1	2
3	2	1	6
3	1	2	6

The first digit, the thousands digit, is the same for all numbers. So, we look at the next digit, which is the hundreds digit. 3 612 has 6 hundreds so it is the largest number followed by 3 216 which has 2 hundreds.

We next look at the tens column where 6 tens are present in 3 162 making it larger than 3 126.

Answer_____ 3 612, 3 216, 3 162, 3 126 _____

3. Write $2\frac{3}{8}$ as an improper fraction.

$$2\frac{3}{8} = \frac{(2 \times 8) + 3}{8}$$

$$= \frac{16 + 3}{8}$$

$$= \frac{19}{8}$$

Answer_____ $\frac{19}{8}$ _____

4. Divide 628 by 12.

$$628 \div 12 = 52.333'$$

$$= 52\frac{1}{3}$$

Answer_____ $52\frac{1}{3}$ _____

5. $8^2 + 6^2 =$

$$8^2 + 6^2 = 64 + 36$$

$$= 100$$

Answer_____ 100 _____

6. Round 15 296 to the nearest thousand.

When rounding a number to the nearest thousand, the most important figure that we must look at is the **HUNDREDS.** Once that figure is 5 or more, then we round it up to the next thousand. If it is 4 or less, then we round it down to the lower thousand.

TTh	Th	H	T	O
1	5	2	9	6

For the question, the hundreds figure in 15 296 is 2, which is less than 5. Therefore, we round it down to the lower thousand.

Answer_____ 15 000 _____

7. Max ate 5 cherries which were $\frac{1}{9}$ of the total number of cherries he picked.

How many cherries did Max pick?

$\frac{1}{9}$ of the total number of cherries $= 5$ cherries

Total number of cherries $= 5 \times \frac{9}{1}$

$$= 45 \text{ cherries}$$

Answer_____ 45 _____ cherries

8. Write the **total** value of the bills and the coin shown below.

$20	$20	$5	$1	5c

$20.00

$20.00

$ 5.00

$ 1.00

$ 0.05
_____

$46.05
_____

Answer $ _____ 46.05 _____

9. Calculate 15% of 120.

$$15\% \text{ of } 120 = \frac{15}{100} \times \frac{120}{1}$$

$$= 18$$

Answer_____ 18 _____

10. Write the digits $\boxed{1}$ $\boxed{2}$ $\boxed{3}$ $\boxed{4}$ in the squares below to create an

addition problem with the **largest** sum.

$$
\begin{array}{r}
\boxed{4}\;\boxed{2} \\
+\;\boxed{3}\;\boxed{1} \\
\hline
7\quad 3 \\
\hline
\end{array}
$$

11. A part of a calendar for the month of April is shown below.

April

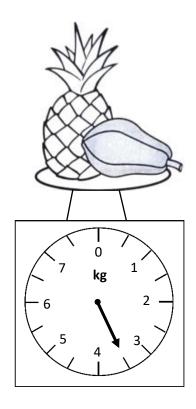| Sun	Mon	Tue	Wed	Thu	Fri	Sat
	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25				

On what day of the week is the 2nd of April?

Sunday 16th April – 7 days = Sunday 9th April

Sunday 9th April – 7 days = Sunday 2nd April

Answer_____ Sunday _____

12. The total mass of a pineapple and a paw paw is shown on the scale below. The mass of the pineapple is 2.75 kg.

What is the mass of the paw paw, in grams?

Mass of pineapple and paw paw = 3.5 kg

Mass of pineapple = 2.75 kg

Mass of paw paw = 3.5 – 2.75

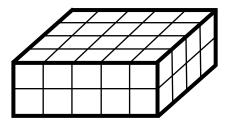$\qquad$ = 0.75 kg

$\qquad$ = 0.75 × 1000

$\qquad$ = 750 g

Answer_____ 750 _____ grams

13. Identical cubes are packed into a box as shown below.

How many cubes are in the box?
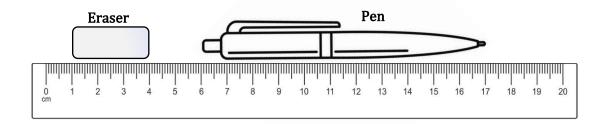
Number of cubes on 1 face = 10 cubes

Number of rows = 4

Total number of cubes in the box = 10×4

$$= 40 \text{ cubes}$$

Answer_____ 40 _____ cubes

14. Calculate the difference in length between the eraser and the pen.

Eraser   Pen
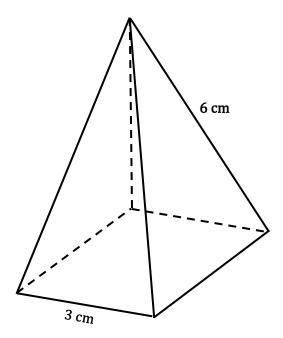

Length of eraser = 3 cm

Length of pen = 11 cm

Difference in length between the eraser and the pen = 11 – 3

= 8 cm

Answer_____ 8 _____ cm

15. The pyramid shown below has a square base.

6 cm

3 cm

How many edges of the pyramid have a length of 6 cm?
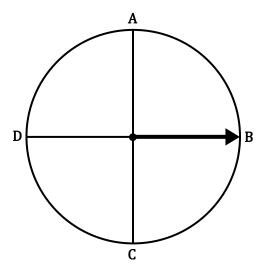
A square based pyramid has 8 edges.

Since the length of one side of the square is 3 cm then the 4 edges at the base will

have a length of 3 cm.

Therefore, the four remaining edges will have a length of 6 cm.

Answer_____ 4 _____ edges

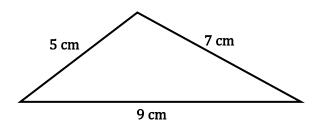16. The arrow below is pointing to B. The arrows moves three quarter-turns in an anticlockwise direction.

To which letter is the arrow now pointing?

1st quarter-turn in an anticlockwise direction = Arrow points to A

2nd quarter-turn in an anticlockwise direction = Arrow points to D

3rd quarter-turn in an anticlockwise direction = Arrow points to C

Answer_____ C _____

17. Name the type of triangle shown below.

All the sides are unequal in the triangle above; therefore, it is a scalene triangle.

Answer_____ scalene triangle _____

18. The table below shows the shoe sizes of some students.

Shoe Sizes

Shoe Size	9	8	7	6	5
Number of Students	11	3	12	9	3

Which shoe size represents the mode?

The mode is the one which occurs most frequently.

Based on the table above, the shoe size which represents the mode is 7.

Answer_____ 7 _____

19. Calculate the mean of the numbers below.

      32   14   24   0   5

$$\text{Mean} = \frac{\text{Sum}}{\text{Frequency}}$$

$$= \frac{32 + 14 + 24 + 0 + 5}{5}$$

$$= \frac{75}{5}$$

$$= 15$$

Answer_____ 15 _____

20. The incomplete tally chart below shows the pets owned by students.

Pets Owned by Students

Pet	Number	Tally
Birds	8	卌 ‖‖
Fishes	10	卌 卌
Dogs	12	卌 卌 ‖

Complete the tally chart to show the number of students who own dogs.

SECTION II

21. Write the missing digit in each box below. [2]

```
    9   □   2   1
 −  2   6   3   7
 ─────────────────
    6   5   8   □
 ─────────────────
```

First, we look at the ones column, 1 cannot subtract 7 so if one was taken from another place value then: 11 − 7 = 4

Therefore, the final answer was 6584.

Now to get the missing value: 6584 + 2637 = 9221

The next missing number is 2.

```
    9   2   2   1
 −  2   6   3   7
 ─────────────────
    6   5   8   4
 ─────────────────
```

22. $6 - 2\frac{5}{14} =$ [2]

$6 - 2\frac{5}{14} = 5\frac{14}{14} - 2\frac{5}{14}$

$= 3\frac{9}{14}$

Answer_____ $3\frac{9}{14}$ _____

23. Karen uses 0.65 metres of cloth to make 1 skirt.

How many metres of cloth would she need to make 12 similar skirts? [2]

Cloth needed for 1 skirt = 0.65 metres

$= 12 \times 0.65$ metres

$= 7.8$ metres

Answer_____ 7.8 _____ metres

24. Kim and Ben estimated the solution to the following problem.   [2]

$$60 \times 18$$

Kim's Estimate
600

Ben's Estimate
1200

Explain who had the better estimate and how it was calculated.

Answer: Ben had the better estimate as he rounded up the 18 to the nearest ten:

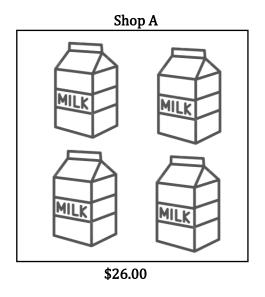18 to the nearest $10 = 20$

$60 \times 20 = 1200$

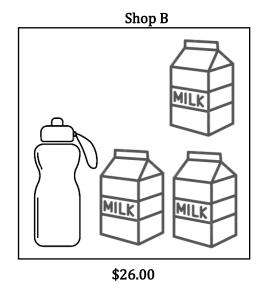On the other hand, Kim chose to multiply 60 by 10 arriving at 600.

This was inaccurate as there are 8 ones present in "18".

25. Shop A and Shop B sell the same packet of milk. Shop A sells 4 packets of milk for $26.00. Shop B sells 3 packets of milk and a container for $26.00. The price of the container is $3.20.

Shop A	Shop B
$26.00	$26.00

What is the difference in the price of a packet milk at Shop A and Shop B?   [3]

Shop A

Cost of 4 packets of milk = $26.00

Cost of 1 packet of milk = $\frac{\$26.00}{4}$

$= \$6.50$

Shop B

Cost of 3 packets of milk and container = $26.00

Cost of 3 packets of milk $= \$26.00 - \$3.20$

$= \$22.80$

Cost of 1 packet of milk $= \dfrac{\$22.80}{4}$

$= \$7.60$

Difference in the price of a packet milk at Shop A and Shop B $= \$7.60 - \$6.50$
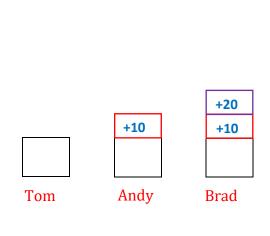
$= \$1.10$

Answer \$ _____ 1.10 _____

26. Andy, Tom and Brad shared $85 among themselves. Andy received $10 more than Tom while Brad received $20 more than Andy.

How much money did **each** boy receive?   [3]

Excess $= \$10 + \$10 + \$20$

$\qquad\quad = \$40$

```
                    +20
          +10       +10
  [ ]      [ ]       [ ]
  Tom      Andy      Brad
```

Remove excess $= \$85 - \$40$

$\qquad\qquad\qquad\quad = \$45$

3 parts $= \$45$

1 part $= \dfrac{\$45}{3}$

$\qquad\quad = \$15$

Amount of money Tom got $= \$15$

Amount of money Andy got $= \$15 + \$10$

$\qquad\qquad\qquad\qquad\qquad = \$25$

Amount of money Brad got $= \$15 + \$10 + \$20$

$\qquad\qquad\qquad\qquad\qquad = \$45$

Answer Tom $ _____ 15 _____

          Andy $ _____ 25 _____

          Brad $ _____ 45 _____

27. The cost of a bag is three times the cost of a cap. The total cost of 2 bags and 3 caps

is $180.

What is the cost of 1 cap? [3]

Cost of 2 bags and 3 caps = $180

Cost of bag = 3 × Cost of 1 cap

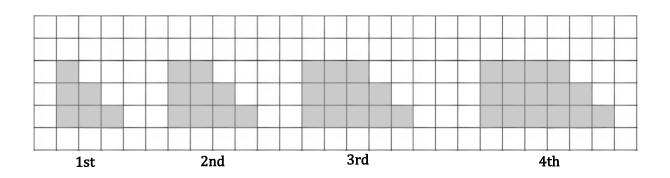Cost of 3 bags = $180

Cost of 1 bag = $\frac{\$180}{3}$

= $60

Cost of 1 cap = $\frac{\$60}{3}$

= $20

Answer $ _____ 20 _____

28. The first 4 elements of a pattern are shown below.

How many squares will form the 11th element? [3]

Number of squares in the 5th element = 18 squares

Number of squares in the 6th element = 21 squares

Number of squares in the 7th element = 24 squares

Number of squares in the 8th element = 27 squares

Number of squares in the 9th element = 30 squares

Number of squares in the 10th element = 33 squares

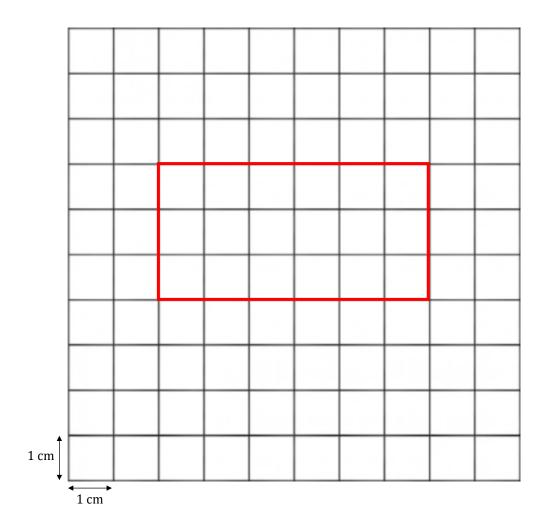Number of squares in the 11th element = 36 squares

Answer_____ 36 _____ squares

State the pattern rule.

Answer: The number of squares present in each consecutive element is increasing in multiples of 3.

29. Draw a rectangle with an area of 18 cm² on the grid below. [2]

1 cm

1 cm

Area of rectangle = Length × Width

18 cm² = 6 cm × 3 cm

OR

18 cm² = 9 cm × 2 cm

30. A clock shows that the time in Trinidad is 6:00 a.m. The clock is 15 minutes slow.

The time in Trinidad is 2 hours ahead of time in Canada.

What is the correct time in Canada?   [2]
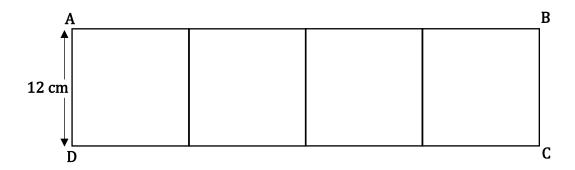
Correct time in Trinidad = 6:00 + 0:15

= 6:15 a.m.

Correct time in Canada = 6:15 – 2:00

= 4:15 a.m.

Answer_____ 4:15 am _____

31. Four identical squares are placed side by side to form the rectangle ABCD.

A _____ B

12 cm

D _____ C

Calculate the difference between the perimeter of one square and the perimeter of the rectangle ABCD. [3]

Perimeter of one square $= S \times 4$

$= 12 \times 4$

$= 48$ cm

Length of rectangle ABCD $= 4 \times 12$

$= 48$ cm

Width of rectangle ABCD $= 12$ cm

Perimeter of rectangle ABCD $= 2 \times ($Length $+$ Width$)$

$= 2 \times (48 + 12)$

$= 2 \times 60$

$= 120$ cm

Difference between perimeter of 1 square and rectangle ABCD = 120 – 48

= 72 cm

Answer_____ 72 _____ cm

32. Keisha's luggage was over the limit by 5 kg. When she removed her hairdryer and

shampoo, the luggage was below the limit by 500 g. When she put back the hairdryer,

the luggage was over the limit by 2 kg.

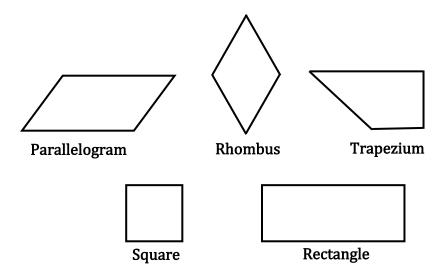What was the mass of the hairdryer, in grams? [3]

Mass of hairdryer = 500 g + 2 kg

= 500 g + 2000 g

= 2500 g

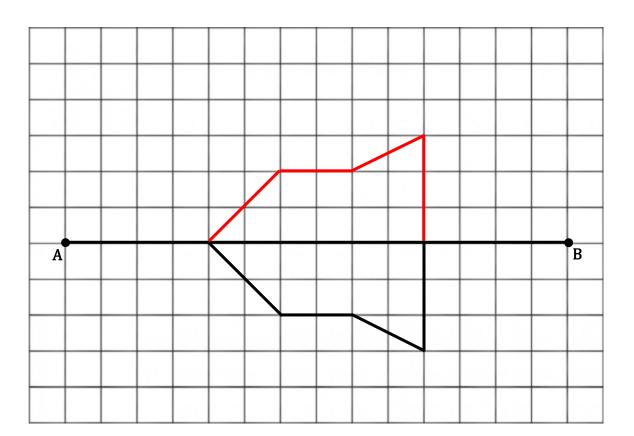Answer_____ 2500 _____ grams

33. Five quadrilaterals are shown below.

Parallelogram   Rhombus   Trapezium

Square   Rectangle

Write the name of the quadrilateral that matches the properties given.   [2]

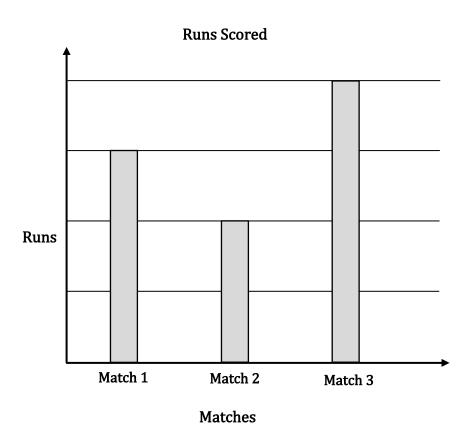| Properties	Name
No lines of symmetry, one pair of parallel sides, one angle greater than a right angle	Trapezium
Two lines of symmetry, two pairs of parallel sides, no right angles	Rhombus

34. Complete the shape on the grid below using AB as the line of symmetry.   [2]

35. The incomplete graph below shows the runs scored by a cricket team in 3 matches.

Runs Scored

The total runs scored in Match 1 and Match 2 was 100.

How many runs were scored in Match 3?

Number of blocks in Match 1 = 3 blocks

Number of blocks in Match 2 = 2 blocks

Total runs scored in Match 1 and Match 2 = 100 runs

3 blocks + 2 blocks = 100 runs

5 blocks = 100 runs

$1 \text{ block} = \dfrac{100}{5}$

$= 20 \text{ runs}$

Number of blocks in Match 3 = 4 blocks

$= 4 \times 20$

$= 80 \text{ runs}$

Answer_____ 80 _____ runs

36. The incomplete table below shows Paul's marks in 5 subjects. Paul's mean mark was 68.

Paul's Marks in Five Subjects

Subject	Science	Mathematics	Art	Music	English Language Arts
Mark	80		55	47	73

Calculate Paul's mark in Mathematics. [3]

Mean mark = 68

Sum of all marks = Mean mark × Frequency

$$= 68 \times 5$$

$$= 340$$

Sum of known marks = 80 + 55 + 47 + 73
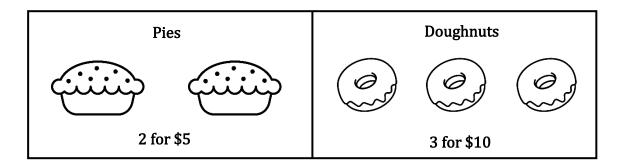
$$= 255$$

Paul's mark in Mathematics = 340 – 255

$$= 85$$

Answer_____ 85 _____

SECTION III

37. Tara bought an equal number of pies and doughnuts. She spent a total of $70.

Pies	Doughnuts
2 for $5	3 for $10

How many pies did Tara buy?   [4]

Cost of 1 pie $= \frac{\$5}{2}$

Cost of 1 doughnut $= \frac{\$10}{3}$

Cost of 1 pie and 1 doughnut $= \frac{\$5}{2} + \frac{\$10}{3}$

$$= \frac{\$15 + \$20}{6}$$

$$= \frac{\$35}{6}$$

Number of pies and doughnuts bought $= \$70 \div \frac{\$35}{6}$
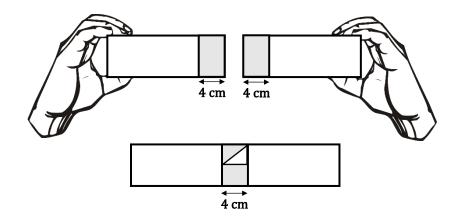
$$= \frac{\$70}{1} \times \frac{\$6}{\$35}$$

$$= 12 \text{ pies and } 12 \text{ doughnuts}$$
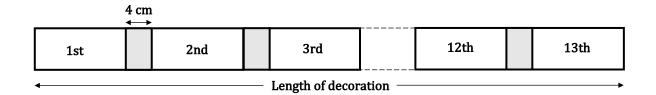
Answer_____ 12 _____ pies

38. Dave made a decoration by sticking rectangular strips of Bristol board together.

When two strips were stuck together, there was an overlap of a length of 4 cm from each strip.

4 cm   4 cm

4 cm

Dave stuck 13 strips of Bristol board, each of length 15 cm, to make the decoration.

4 cm

| 1st | | 2nd | | 3rd | | 12th | | 13th |

Length of decoration

Calculate the length of Dave's decoration.

In the length of Dave's decoration, there are 12 overlaps, 2 pieces at the ends with a length of 11 cm and 11 pieces in the middle with a length of 7 cm.

For 12 overlaps, length $= 12 \times 4$

$$= 48 \text{ cm}$$

For 2 pieces at the end, length $= 2 \times 11$

$$= 22 \text{ cm}$$

For 11 pieces in the middle, length $= 11 \times 7$
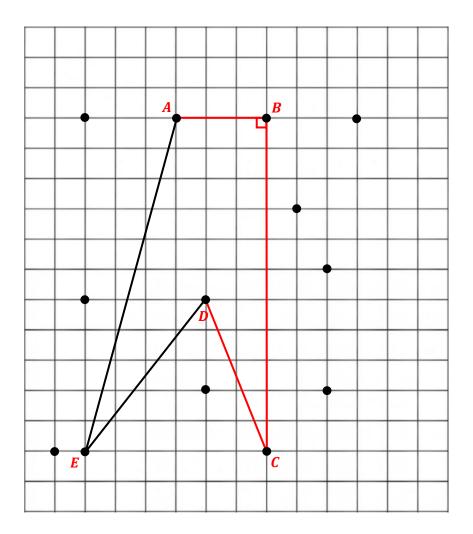
$$= 77 \text{ cm}$$

Hence,

Total length $= 48 + 22 + 77$

$$= 147 \text{ cm}$$

Answer_____ 147 _____ cm

39. Jenna drew a five-sided shape with one **right** angle. Two sides of the shape are

shown on the grid below. [4]

(a) Complete the shape by joining some of the dots on the grid.

(b) Describe all the angles in the shape.

Answer:

Assume that the question is referring to the interior angles of the shape.

The descriptions are as follows:

Angle at A is an obtuse angle.

Angle at B is a right angle.

Angle at C is an acute angle.

Angle at D is a reflex angle.

Angle at E is an acute angle.

40. Brandy and Clara played 3 rounds in a video game. The incomplete table below

shows their scores. [4]

Scores in Video Game

Student	Round 1	Round 2	Round 3
Brandy	90	82	
Clara	48		

Medals were given based on the average score of the 3 rounds.

Medals Based on Average Score

Bronze	Silver	Gold
$61 - 90$	$91 - 120$	$121 - 150$

(a) What is the **lowest** score that Brandy should obtain in Round 3 to qualify for a

silver medal?

The score needed to qualify for a silver medal $= 91 \times 3$

$$= 273$$

Lowest possible score $= 273 - 172$

$$= 101$$

Answer_____ 101 _____

(b) Clara's total score was 140. Her score in Round 2 was **three times** her score in

Round 3.

What was Clara's score in Round 3?

Total $= 140$

Remove excess $= 140 - 48$

$\qquad = 92$

4 parts $= 92$

1 part $= \frac{92}{4}$

$\qquad = 23$

$\therefore$ Score in Round 3 $= 23$

Answer_____ 23 _____