Name:_____ Class:_____

- Complete all answers on this question paper.
- Calculators may not be used.

1. Which number is the arrow pointing to on the number line?
Tick the correct option.

☐ 2,5 ☐ 3,25 ☐ 2 ☐ 3 (1)

2. Complete. *Fill in the answer only.*

a) _____ = 357 + 256 (1)

b) $16\frac{1}{8} - \frac{6}{8} =$ _____ (1)

c) 33,8 + _____ = 57,7 (1)

d) _____ = 3,99 + 0,11 (1)

e) 0,4 ÷ 100 = _____ (1)

f) _____ = 1 000 × 1,9 (1)

g) 10 – _____ = 8,7 (1)

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3. Calculate. *Show your working.*

a) $\frac{5}{7} + \frac{5}{21}$

(2)

b) $\frac{1}{5} + \frac{1}{3}$

(2)

c) $\frac{7}{12}$ of 84

(2)

d) 60% of 65

(2)

4. How many sixths in 3? _____ (1)

5. Write $\frac{34}{50}$ as a decimal fraction. _____ (1)

6. The ratio of yellow to blue in a paint mixture to make a shade of green is 2 : 5.

a) If 10 litres of yellow paint is used, how much blue paint is needed?

_____ litres (1)

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b) If a mixture has 42 litres, how many litres of yellow paint is used? *Show your working.*

_____ litres (2)

7. An ice-cream shop sells 7 different flavours of ice cream. Cones are sold with 2 different flavoured scoops of ice cream. Calculate how many different combinations of flavours there are. *Show your working.*

_____ (2)

8. A sports shop is running a promotion. Every 6th customer entering the shop receives a free energy drink. Every 8th customer entering the shop receives a free towel. 400 customers entered the shop, how many customers received an energy drink and a towel? *Show your working.*

_____ (2)

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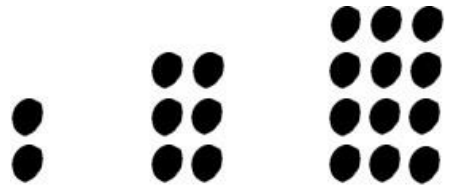
9. Kyle makes pictures with dots like this. The first 3 pictures make a pattern.



Picture 1 Picture 2 Picture 3

Picture number	1	2	3	4	B
Number of dots	2	6	12	A	42

a) Determine the missing values for A and B in the table.

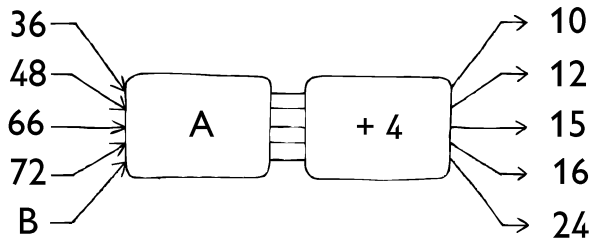
A: _____

B: _____ (2)

b) Write a formula that correctly calculates the number of dots in a picture.

Number of dots = _____ (1)

10. Write the rule for A and the value of B in the flow diagram.



A: _____

B: _____ (2)

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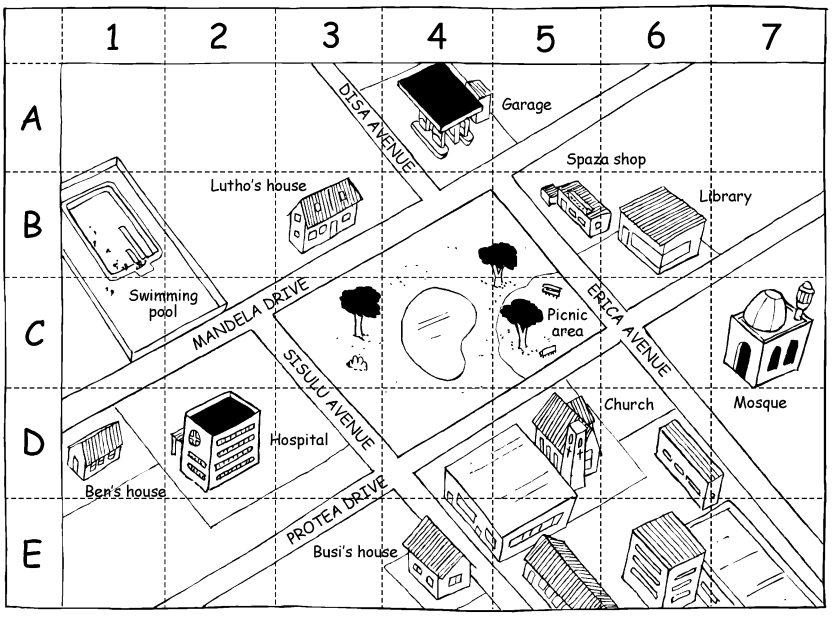
11.



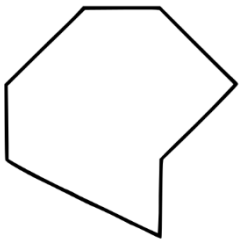
a) Give the grid reference of Ben's house. (1)

b) Which object is found at B6? *Tick the correct option.*

☐ Hospital ☐ Spaza shop

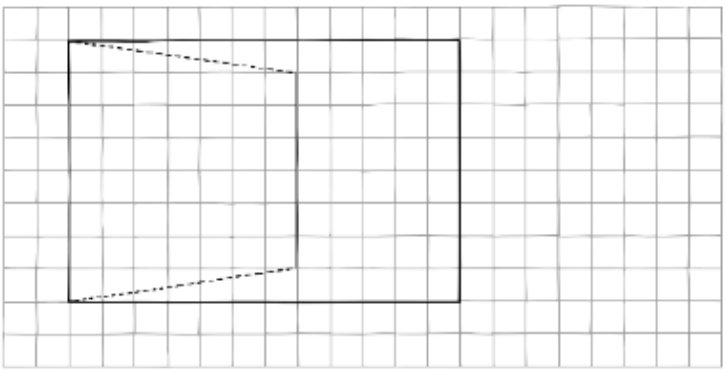
☐ Library ☐ Swimming pool (1)

12. What is the name of the polygon?



(1)

13. Complete the reduction of the rectangle.



(1)

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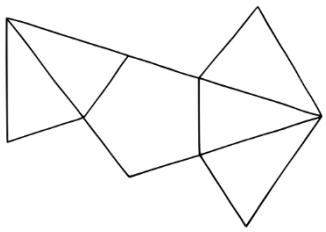
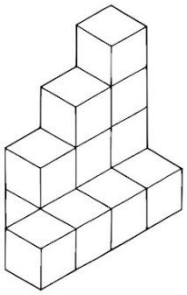
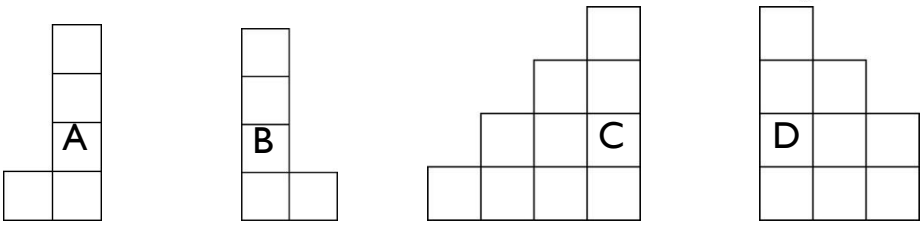
14. How many vertices will the polyhedron that is made from this net have?



_____ vertices (1)

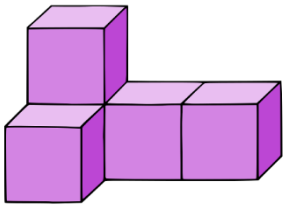
15. Which image is NOT a view of the object? *Tick the correct option.*





☐ A ☐ B ☐ C ☐ D (1)

16. What is the fewest number of small cubes needed to make this arrangement a perfect cube?



_____ small cubes (1)

17. Complete. *Fill in the answer only.*

870 g = _____ kg (1)

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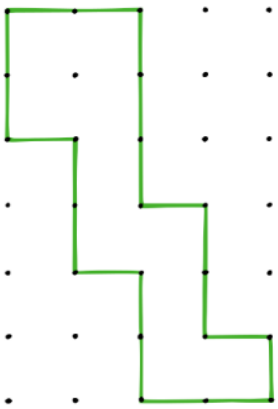
18. Which is the most likely perimeter of an athletics track? *Tick the correct option.*

☐ 400 metres ☐ 40 metres

☐ 400 centimetres ☐ 4 kilometres

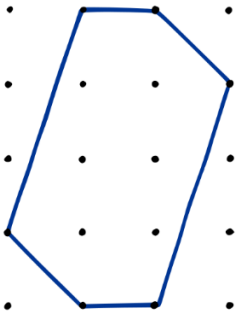
☐ 400 millilitres (1)

19. Determine the perimeter of the polygon.



_____ units (1)

20. Determine the area of the polygon. *Show your working.*



_____ square units (2)

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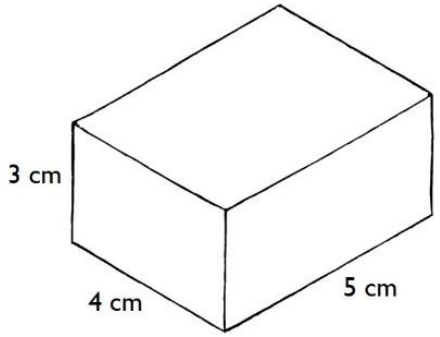
21. The coldest day measured in a certain year in Johannesburg is -6˚C and the warmest day measured in that year is 35˚C. What is the difference between the coldest and warmest temperatures measured? *Show your working.*

_____˚C (2)

22. Determine the volume of this rectangular prism.



_____ cm^3 (1)

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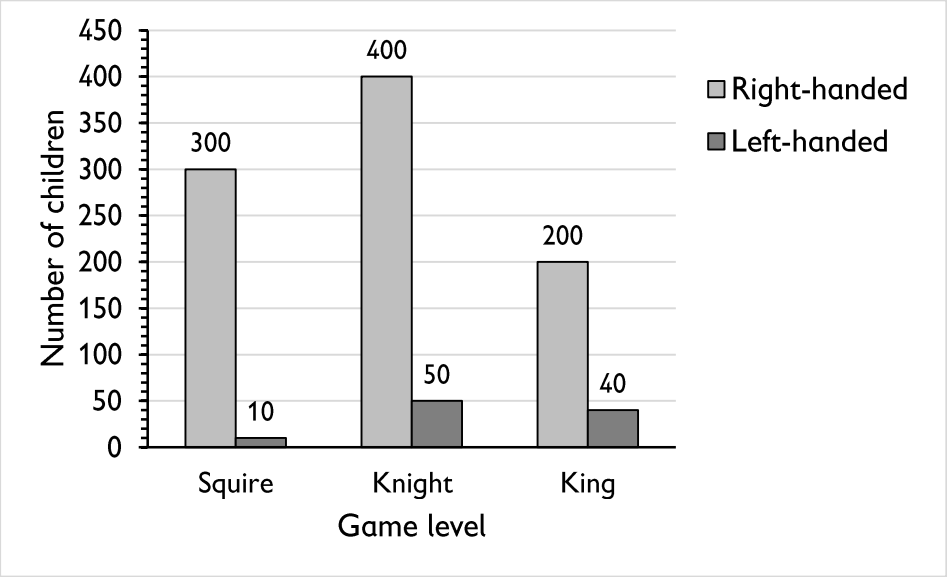
23. Research claims that left-handed people are better at computer games than right-handed people. In a study, 1 000 people played a computer game that ranked the players as Squire (okay), Knight (good) and King (excellent). The results of the study are shown in the bar graph.



a) How many right-handed players were there in total?

(1)

b) How many players were ranked as Knight (good) in total? (1)

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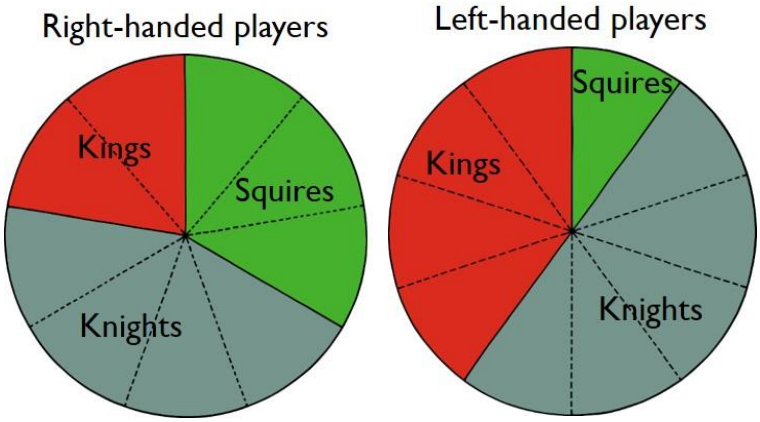
24. Research claims that left-handed people are better at computer games than right-handed people are. In a study, 1 000 people played a computer game that ranked the players as Squire (okay), Knight (good) and King (excellent). Tebogo represented the same data using pie graphs.



a) What fraction of the right-handed players are Squires?

(1)

b) What percentage of the left-handed players are Squires?

(1)

c) Tick the statement that correctly describes the data.

- ☐ Left-handed people are better at playing computer games than right-handed people are.
- ☐ Half the number of left-handed players are Kings.
- ☐ Right-handed people are better at playing computer games than left-handed people are.
- ☐ A third of the number of right-handed players are Kings. (1)

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