



1. Write the number three hundred and eight thousand and sixty nine using digits.

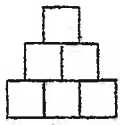
2. Pattern 1 Pattern 2 Pattern 3



1 square



3 squares



6 squares

- a) How many squares are needed for pattern 4? _____
- b) How many squares are needed for pattern 10? _____

3. The length of the car is 3.5m. Estimate the length of the lorry, without using a ruler.



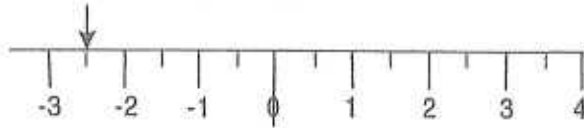
_____ m

4. Here is a table showing information about different types of snake.

Type	Colour	Location	Length (m)
Anaconda	Green	S. America	4 - 5
Cobra	Black	Asia	2 - 3
Puff Adder	Grey	Africa	1 - 2
Rubber Boa	Brown	N. America	0 - 1
Short-tailed Python	Red	Australia	3 - 4

- a) In which location would you find a Puff Adder? _____
- b) What colour is the snake found in N. America? _____
- c) Monty is a snake 3.6 m long. What type of snake is Monty? _____

5. What value is the arrow pointing to?



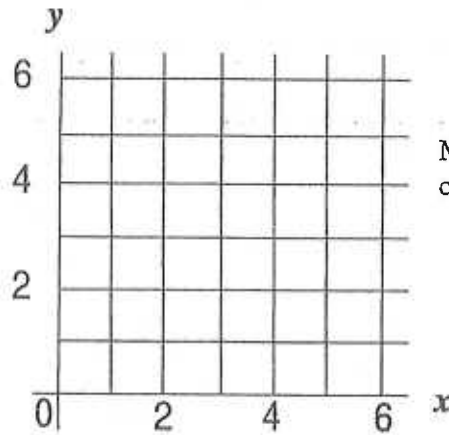
6.

a.) On the grid plot points:

A (1, 2)

B (3, 2)

C (1, 5)



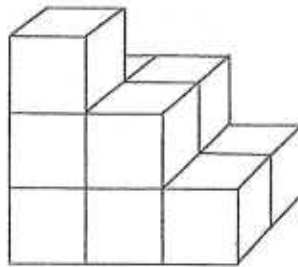
Measurements are in centimetres

b) Draw the triangle ABC.

c) What is the area of triangle ABC?

_____ cm²

7. John builds a solid made of cubes. How many cubes did John use to build it?



8. Choose your answer from the following list:

IMPOSSIBLE UNLIKELY EVEN CHANCE LIKELY CERTAIN

a) You throw a dice and it lands on an odd number: _____

b) You will score less than 0% in this exam. _____

c) You throw four coins and they all land on heads. _____

9. The timetable below shows the times of some trains which travel from London to Dover.

Train	A	B	C	D	E
London (Victoria)	1010	1040	1110	1540	2240
Dover	1202	1217	1304	1732	0030

- a) How long does train C take to travel from London to Dover? _____
- b) Which train is the first to arrive at Dover after 3:25pm? _____

10. Complete the number machines.

Example $8 \rightarrow \boxed{\times 3} \rightarrow 24 \rightarrow \boxed{-2} \rightarrow 22$

a) $12 \rightarrow \boxed{\times 3} \rightarrow \dots \rightarrow \boxed{-2} \rightarrow \dots$

b) $y \rightarrow \boxed{\times 3} \rightarrow \dots \rightarrow \boxed{-2} \rightarrow \dots$

11. a) An athlete completes the 5000m race at an athletics meeting. How many kilometres has she run? _____ km
- b) Another athlete in the same race gives up after 4.2km having injured herself. How many metres from the finish was she when she gave up? _____ m

12. The **mode** of a set of numbers 3 4 4 6 7 is 4.

The **range** of a set of numbers 1 3 4 5 7 is 6.

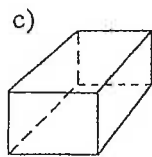
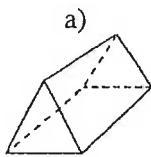
Write a set of five numbers that has a mode of 4 **and** a range of 6.

13. Write the following numbers in order, putting the **smallest** number first.

7.765 7.675 6.765 7.756 6.776

14. Choose the name from the list below which best describes each of the following solid objects.

CUBOID CYLINDER CONE CUBE
 TRIANGULAR BASED PYRAMID TRIANGULAR PRISM



- a) _____
 b) _____
 c) _____

15. A hexagonal spinner is spun twenty times. The scores are as follows:

1 3 5 2 6 2 3 5 3 1
 6 3 3 5 3 1 4 6 2 5

- a) Fill in the tally column.
 b) Fill in the frequency column.

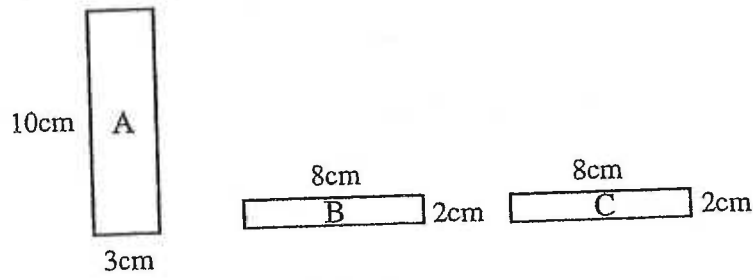
Score	Tally	Frequency
1		
2		
3		
4		
5		
6		

16. Calculate 301×54 .

17. Find the value of x in the equation:

$$8x - 3 = 29$$

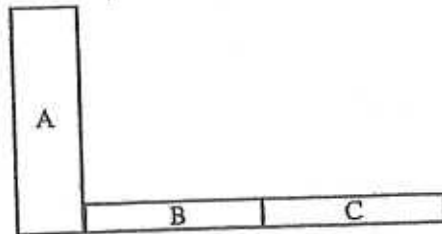
18. Rebecca has three tiles.



a) Find the area of tile A.

_____ cm^2

b) Rebecca puts them together to make an L - shape.



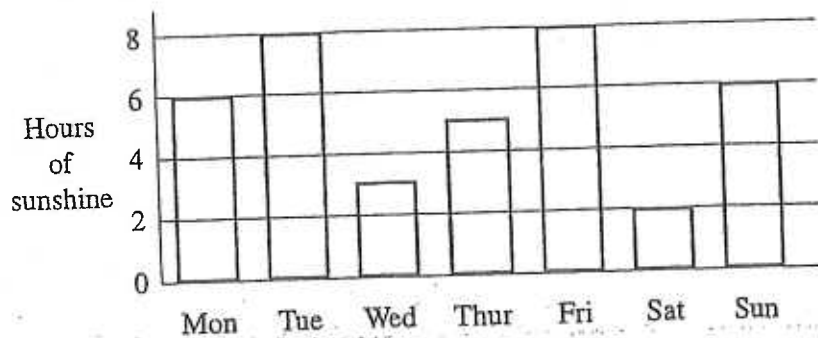
i) Find the **perimeter** of the shape.

_____ cm

ii) Find the **area** of the shape.

_____ cm^2

19. This graph shows the number of hours of sunshine recorded each day.



a) Which day had the least sunshine?

b) Which day had 5 hours of sunshine?

c) Which days had twice as many hours of sunshine as Wednesday?

20. From the list of numbers below, answer the following questions:

4 6 7 13 15 25

- a) Which two numbers are prime numbers? _____
- b) Which two numbers are square numbers? _____
- c) Which number is **both** a multiple of 3 **and** a factor of 12? _____
-

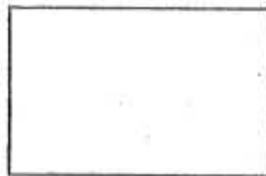
21. John is 12 years old.

- a) Write an expression for John's age in x years time. _____
- b) Write an expression for John's age t years ago. _____
-

22.



Square



Rectangle



Isosceles
Triangle

Complete the following table for the given shapes:

	Square	Rectangle	Isosceles Triangle
Number of lines of symmetry			

23. Gopal asked 20 people the following question, 'What colour are your eyes?'

Here are their replies:

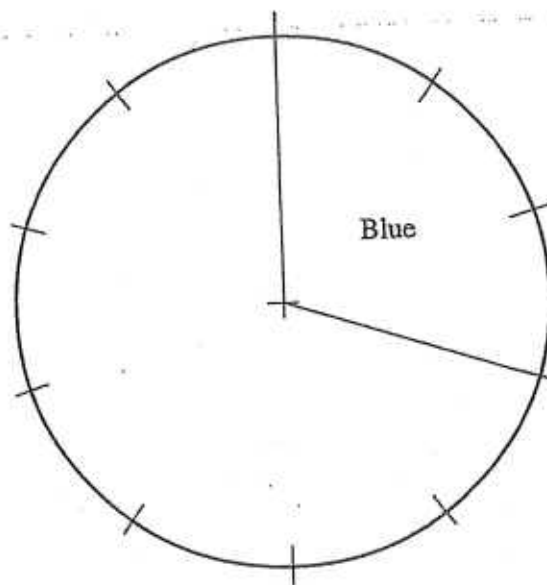
Blue 6

Brown 7

Green 2

Other 5

Complete the pie chart. (The entry for 'Blue eyes' has been done for you).



24. a) Approximate the following numbers, to the nearest 10:

79 _____

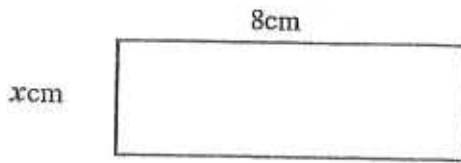
64 _____

18 _____

b) Now use these approximates to estimate the following sum:

$$(79 + 64) \div 18$$

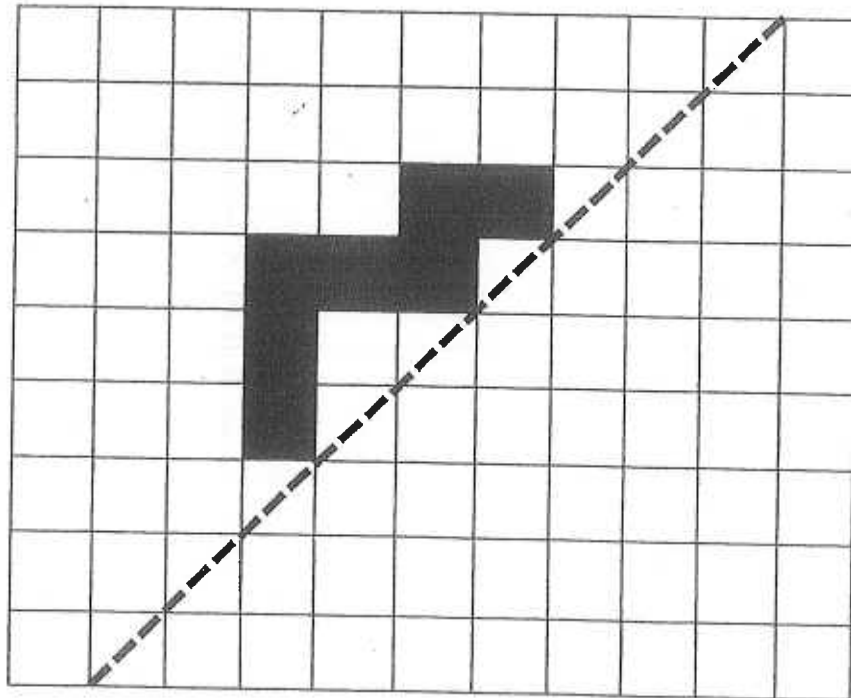
25. The area of this rectangle is 20 cm^2 .



- a) Find the value of x .
- b) Find the perimeter of the rectangle.

_____ cm

26. Draw an accurate reflection of the following pattern in the dotted mirror line.



27. a) What is the **mode** of the set of numbers?

5 3 9 3 8 4

- b) What is the **median** of the set of numbers?

7 4 2 9 3

28. 20000 millilitres of orange squash is to be poured into glasses.
Each glass holds 300 millilitres.

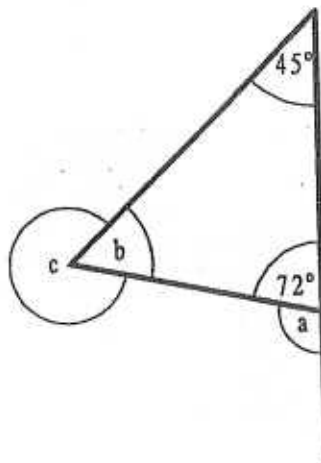
a) How many glasses can be filled from the orange squash? _____

b) How much is left over? _____ ml

29. 4 apples and 3 oranges cost 77p.
4 apples and 5 oranges cost 99p.

How much does one orange cost? _____ p

30.



a) Calculate angle a. _____

b) Calculate angle b. _____

c) Calculate angle c. _____

d) Which of the angles a, b, c, is ACUTE? _____

31. The 50 members of a school club belong to two classes X and Y. The chart shows the number of members from each class.

	X	Y
Girls	16	14
Boys	12	8

What fraction of the club are:

- a) Boys? _____
- b) Members of class Y? _____
- c) Girls from class X? _____

-
32. William spends half of his pocket money on Saturday, and one quarter on Sunday. This leaves him with 75pence for the rest of the week. How much pocket money does he get each week?
- _____

-
33. Simplify the following expressions:

- a) $7t + 8t$ _____
- b) $7x - x$ _____
- c) $11x + 3y - x + 2y$ _____

34. The formula to find the circumference of a circle is:

$$\text{Circumference} = 3.14 \times \text{Diameter}$$

a) If the radius of the circle is 5cm. What is the diameter of the circle?

_____ cm

b) Find the circumference of the circle.

_____ cm

35. The ingredients for making 4 cheese scones include:

- 100 grams of flour
- 50 grams of butter
- 60 grams of cheese
- 2 eggs
- $\frac{1}{2}$ pint of milk.

a) How much butter is needed for 12 cheese scones?

_____ g

b) How much milk is needed for 6 cheese scones?

_____ pts

c) How much cheese is needed for 3 cheese scones?

_____ g

d) If you only had 250 grams of flour but plenty of the other ingredients, how many cheese scones could you make?

36. There are 120 people in a swimming pool. $\frac{3}{5}$ of the people are female.

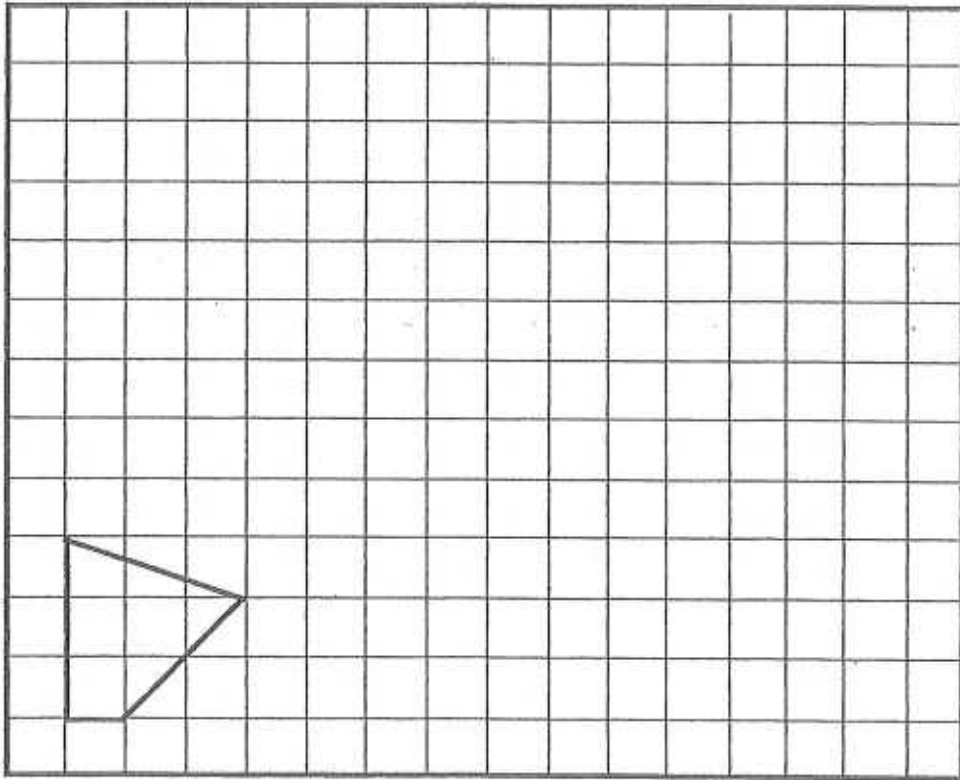
a) What percentage of the people are female?

b) How many people are female?

37. a) If $y = 2x - a$, find y when $x = 3$ and $a = 2$.

b) If $m = \frac{p}{q}$, find m when $p = 36$ and $q = 4$.

38. Enlarge this shape by a scale factor of 3.

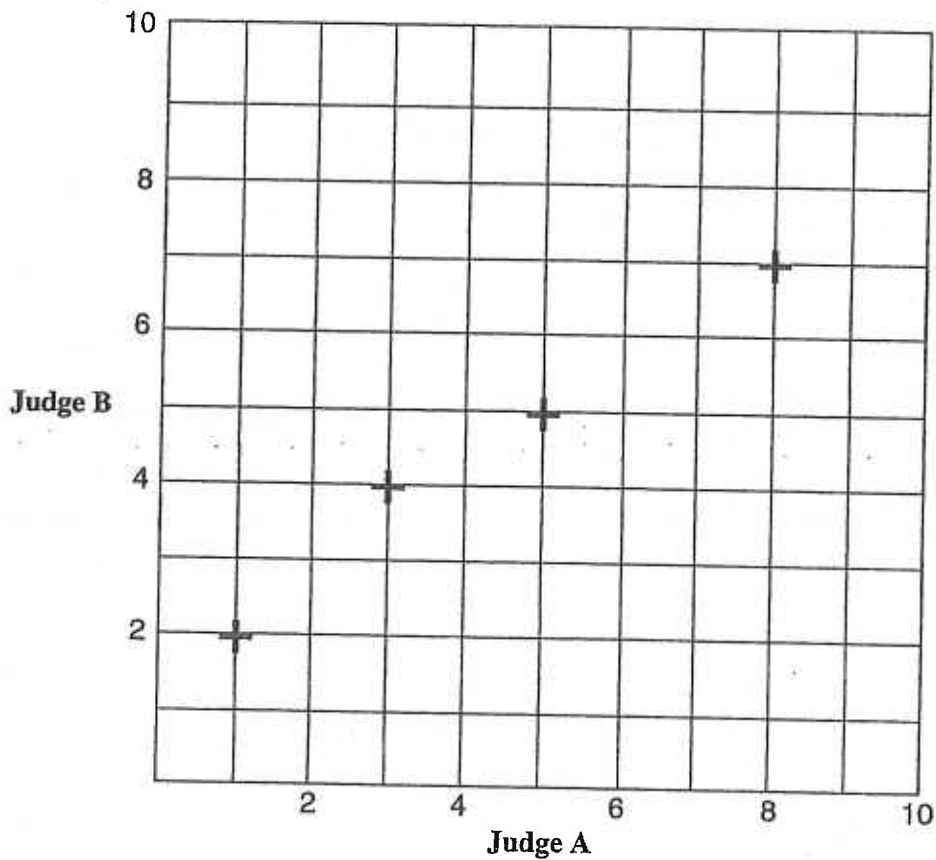


39. Jane thinks of a number. She subtracts 4 and then doubles the result. The final answer is 20. What number did Jane think of?

40. In a 'Dog of the Year' show, two judges award marks out of 10 to each of eight dogs. The marks are shown below.

Dog	Rover	Fido	Bonzo	Butch	Lucky	Floppy	Lassie	Suki
Judge A	3	5	1	8	2	9	8	5
Judge B	4	5	2	7	3	9	8	6

- a) Show these marks on the scatter diagram below. (The first four have been done for you).



- b) From **your graph** do you think that the judges agree with each other ...
- Tick one box from this list below.

- perfectly
- fairly well
- not at all