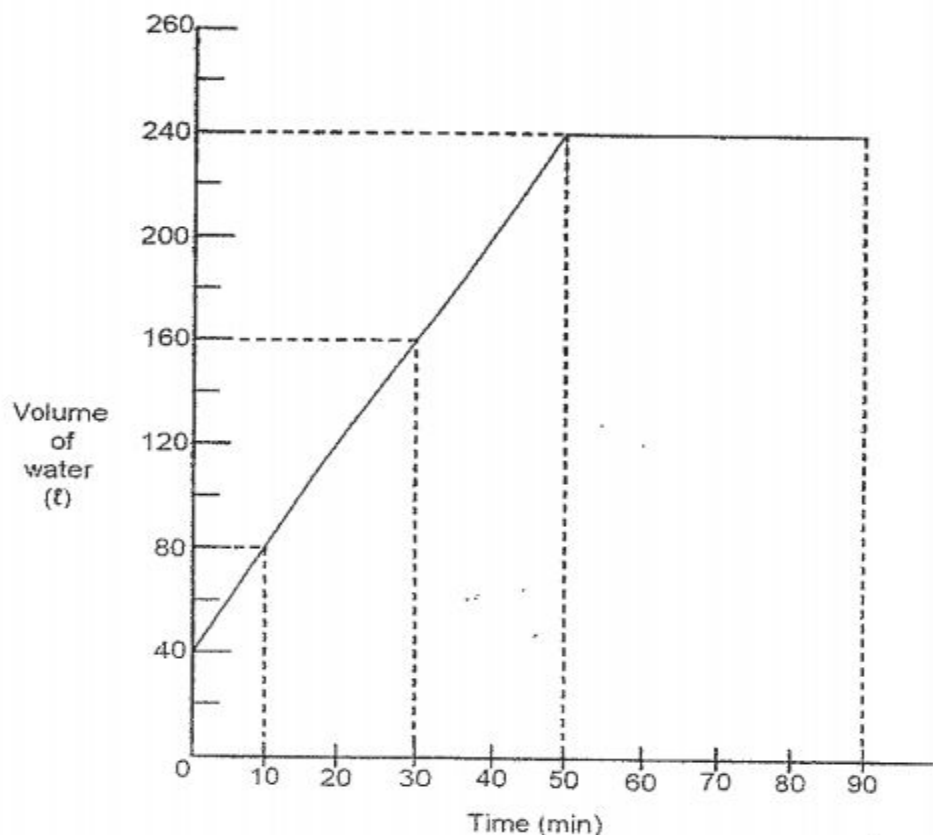# Question 1

Madam Fatimah baked some cupcakes. After selling $\frac{1}{4}$ of the cupcakes, she packed the remaining cupcakes into 12 boxes. There were 4w cupcakes in each box. How many cupcakes did Madam Fatimah bake in all?
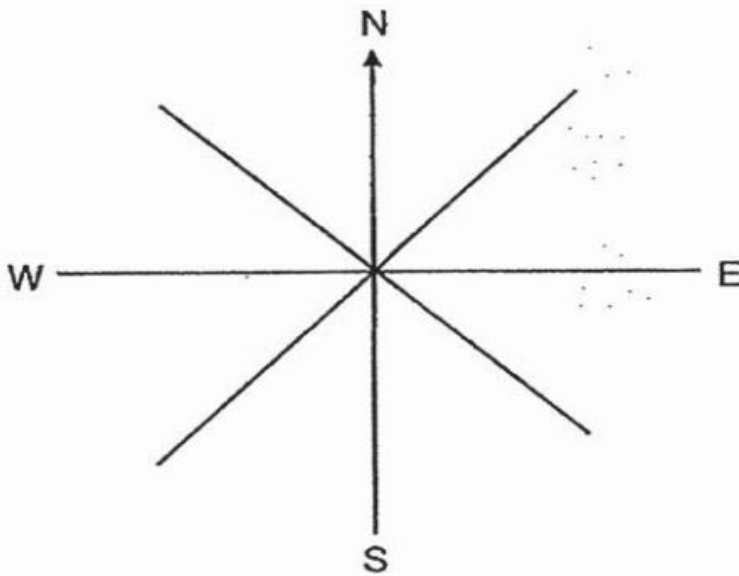
Question 2

A rectangular tank contained some water at first. A tap was then turned on to fill the tank completely with water. It was turned off at the end of 90 minutes. The graph below shows the amount of water in the tank at the end of 90 minutes.

(a) In one minute, how many litres of water flowed from the tap?

(b) How many litres of water overflowed from the tank at the end of 90 minutes?

Question 3

Jimmy is facing west now. When he makes a $\frac{3}{4}$ – turn in a clockwise direction and another $\frac{1}{4}$ – turn in an anticlockwise direction, where will Jimmy be facing?

Question 4

Find the value of $72 + 8 \times 4 - 20 \div 5$.

Question 5

Arrange the following distances from the shortest to the longest.
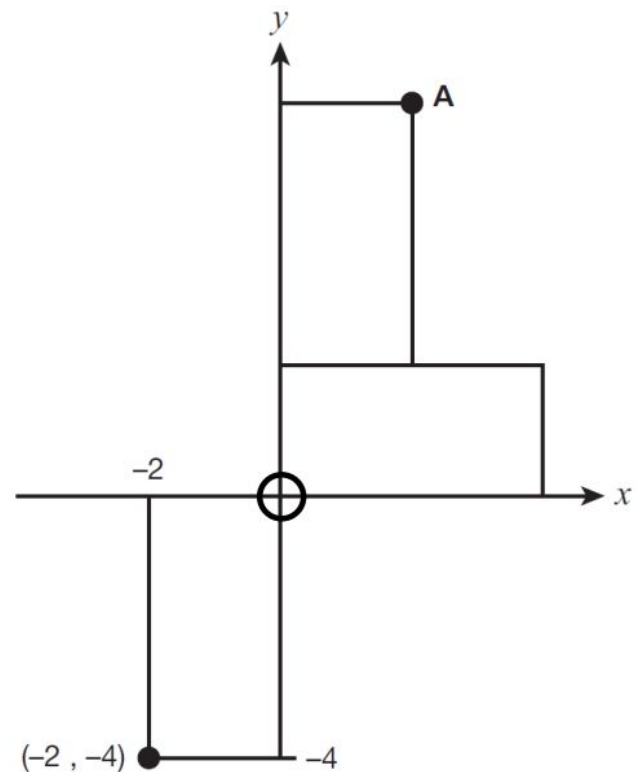
$6\frac{2}{3}$ km	6 km 66 m	6.6 km

	Shortest		Longest
(1)	6 km 66 m	$6\frac{2}{3}$ km	6.6 km
(2)	6 km 66 m	6.6 km	$6\frac{2}{3}$ km
(3)	$6\frac{2}{3}$ km	6.6 km	6 km 66 m
(4)	6.6 km	6 km 66 m	$6\frac{2}{3}$ km

Question 6

Three identical rectangles are drawn.

What are the co-ordinates of A?

(,   )   **(2 marks)**

Question 7

Mr Wong has a 10-m long string. He cuts the string into shorter lengths of $\frac{5}{6}$ m each. How many such shorter pieces of string will he get?

Question 8

I think of a number. I multiply my number by 9 and add 5 to the result. The answer is 50. What is my number?
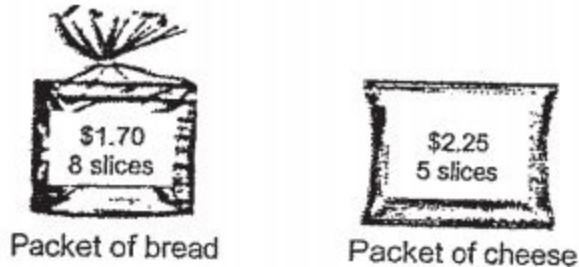
Question 9

Diana has 1625 mℓ of orange juice in a jug. She poured the juice into similar glasses, filling each glass with 250 mℓ of orange juice.

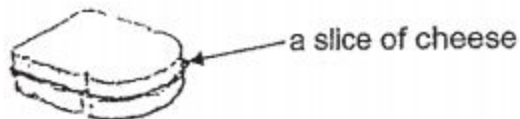(a) What was the maximum number of such glasses Diana could fill?

(b) How much of the orange juice was left in the jug?
    Give your answer in litres.

Question 10

In a shop, bread and cheese were sold only in packets as shown below. A packet of 8 slices of bread cost $1.70 and a packet of 5 slices of cheese cost $2.25.

$1.70
8 slices

$2.25
5 slices

Packet of bread   Packet of cheese

a) Evan wanted 27 slices of bread and 18 slices of cheese to make some sandwiches. What was the least amount of money that Evan spent on the bread and cheese at the shop?

(b) Ron wanted to make at least 50 sandwiches for a party, each using only 2 slices of bread and a slice of cheese.
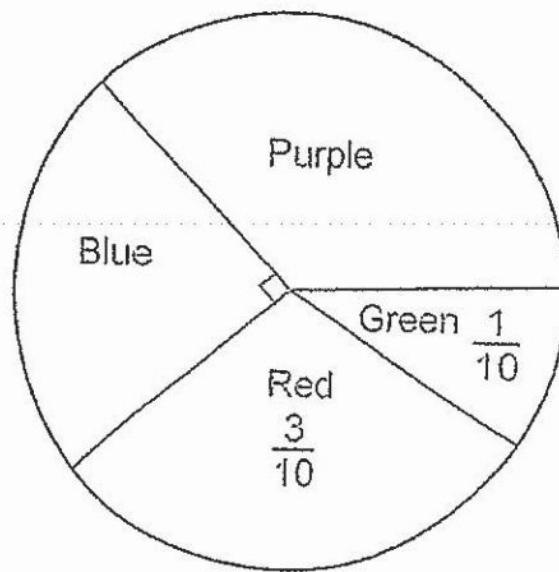
a slice of cheese

He bought some packets of bread and cheese and did not have any remaining slices of bread and cheese after he finished making the sandwiches. What was the least amount of money that Ron spent on the bread and cheese at the shop?

Question 11

May bought 160 red and blue buttons. 25% of the buttons bought were red. May used 75% of the blue buttons for art work.

How many blue buttons did May use?

Question 12

In a survey, each pupil was asked to name a favourite colour.
The pie chart showed their choices.

Purple

Blue

Green $\frac{1}{10}$

Red $\frac{3}{10}$

15 pupils chose blue as their favourite colour. How many pupils chose purple as their favourite colour?

Question 13

A bag contains a number of different coloured balls.
A ball is selected at random from the bag.
The probability of selecting a blue ball is 0·3.

(a) Why is the following statement incorrect?
Explain your answer clearly.

'More than half the balls in the bag are blue.'

(b) What is the probability that a ball selected at random from the bag is not blue?

(c) There are 50 balls in the bag.
How many of them are blue?

Question 14

The Primary 6 teachers and pupils from Everest Primary School went on a learning journey. For every 38 pupils, there were 2 teachers with them. There were 216 more pupils than teachers. How many pupils went on the learning journey?
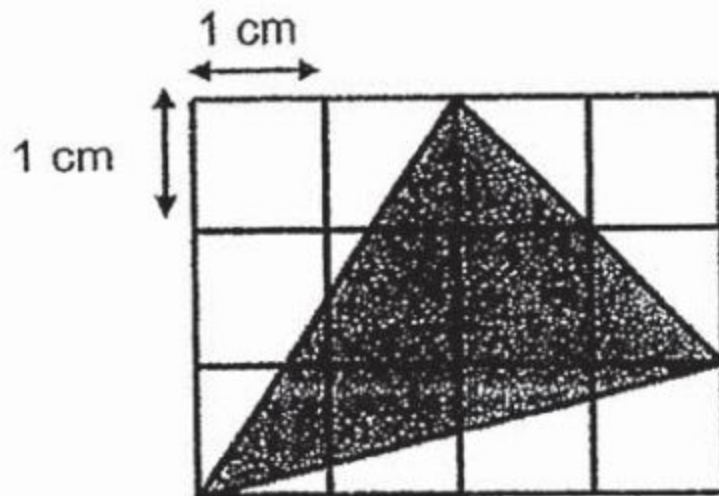
Question 15

Ryan placed some wooden blocks in a pattern. Part of the pattern is shown below.
There were 3 white blocks between every 2 black blocks. He used a total of 19 black
blocks. How many white blocks did he use?

Question 16

What fraction of the figure is shaded?

1 cm

1 cm

Question 17

Three apples and a banana cost 32p. Six apples and a banana cost 53p.
How much does one banana cost?

Question 18

Gavin travelled a journey of 240 km. He drove at an average speed of 60 km/h for the first 1 hour. For the remaining journey, he drove at an average speed of 90 km/h. What was the total time taken for the journey?

(1) 5 h
(2) 2 h
(3) 3 h
(4) 4 h

Question 19

The table below shows the marks Zack scored for his first three Mathematics tests. He wants his average score to be 72 marks. How many marks must he score for the 4th test?

Test	1	2	3	4
Score	70	68	72	?

Question 20

How many of the letters below have **both** parallel and perpendicular lines in it?

MELT

Question 21

Ivan left his house for a cinema at 11 15 for a movie. He took 35 min to reach the cinema. The movie lasted 1h 45 min. What time did the movie end? Express your answer in the 24-hour clock.
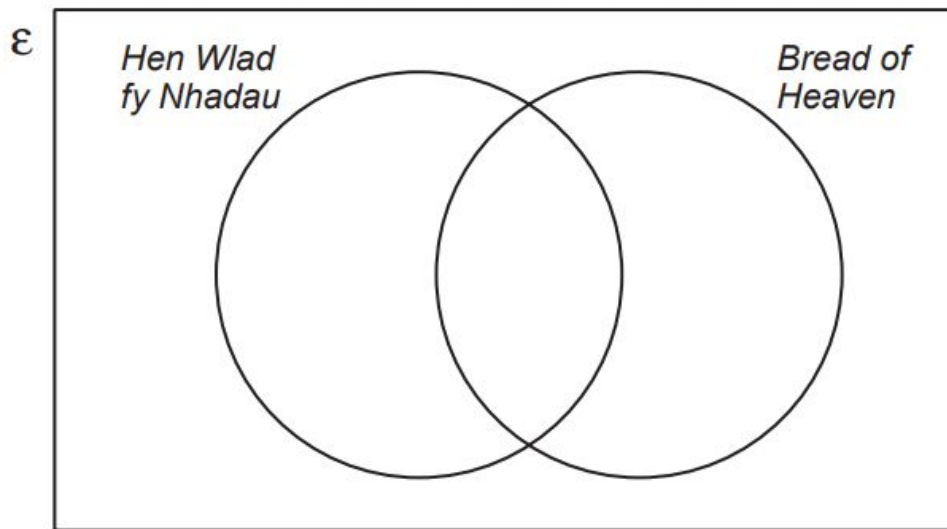
Question 21

30 rugby supporters travel to Cardiff on a coach.
They decide to investigate how many of them can sing one, or both, of the songs *'Hen Wlad fy Nhadau'* and *'Bread of Heaven'*.

- 12 say they can sing both songs.
- 18 say they can sing *'Bread of Heaven'*.
- 5 say they cannot sing either of the songs.

(a) Complete the Venn diagram below to show this information.
The universal set, ε, contains all of the 30 supporters on the coach.

Question 22

The figure shows a cubical tank which is $\frac{3}{5}$-filled with water.

What is the volume of water needed to fill up the tank to the brim?

10 m