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10 Primrose throws a biased dice 240 times.
The table gives information about her results.

Score	Frequency
1	90
2	30
3	18
4	48
5	16
6	38

Primrose is going to draw a pie chart for her results.

(a) Work out the angle in the pie chart for a score of 6

.....
(2)

Donatello spins a biased 5-sided spinner a number of times.
He draws a pie chart for his results.

The table gives the angle in the pie chart for each number the spinner lands on.

Number on spinner	Angle in pie chart
1	60°
2	80°
3	100°
4	70°
5	50°

The spinner lands on 3 a total of 250 times.

(b) Work out the total number of times Donatello spins the spinner.

.....
(2)

(Total for Question 10 is 4 marks)



11 (a) Simplify $t + t + t$

.....
(1)

(b) Simplify $3p \times 5q$

.....
(1)

(c) Expand $4(y - 5)$

.....
(1)

(d) Solve $\frac{8x}{5} = 9.2$

$x =$
(2)

(Total for Question 11 is 5 marks)

12 Here is a trapezium.

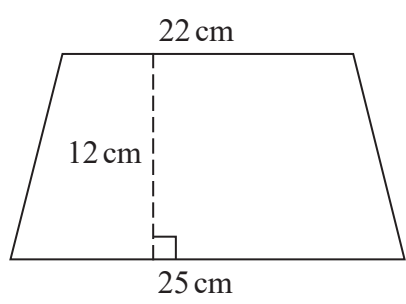


Diagram **NOT** accurately drawn

Work out the area of the trapezium.

.....cm²

(Total for Question 12 is 2 marks)

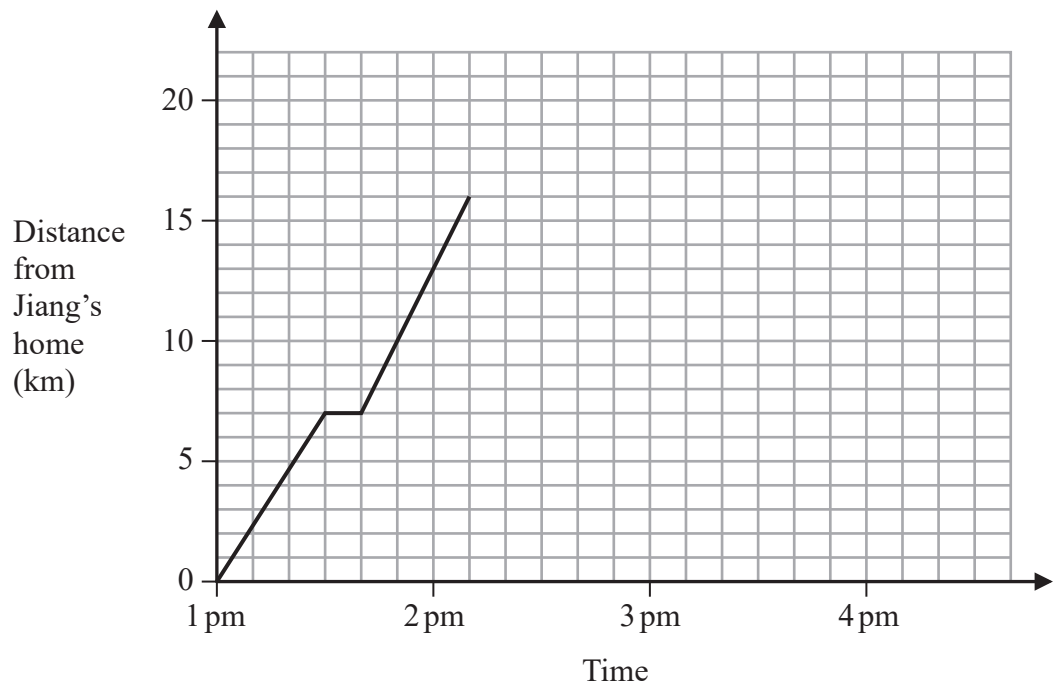


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13 Jiang left her home at 1 pm to cycle to a bicycle shop.
Here is the travel graph for Jiang's journey to the bicycle shop.



Jiang stopped on the way to the bicycle shop for a rest.

(a) For how long did she stop for a rest?

.....minutes
(1)

(b) Work out Jiang's average speed, in kilometres per hour, for that part of her journey from her home to when she stopped for a rest.

.....kilometres per hour
(2)

Jiang spent 40 minutes at the bicycle shop.
She then cycled home at a constant speed.
She got to her home at 3 50 pm.

(c) Show all this information on the graph.

(2)

(Total for Question 13 is 5 marks)



14

1 euro = 1.25 Japanese Yen

1 Canadian dollar = 0.72 euros

Natsuko has 360 Japanese Yen.
Zoe has 425 Canadian dollars.

Natsuko and Zoe each change their money into euros.

Zoe gets more euros than Natsuko.
How many more?

.....euros

(Total for Question 14 is 3 marks)

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15 Aarav is going to buy a laptop.

The laptop costs 39 000 rupees.

Aarav already has $\frac{1}{3}$ of the cost of the laptop.

He needs to save for the rest of the cost.

Aarav has a Saturday job.

Each Saturday his pay is 5300 rupees.

He is going to save 55% of his pay.

Work out the number of Saturdays Aarav must work until he has saved the rest of the cost of the laptop.

.....
(Total for Question 15 is 5 marks)



16 Three numbers have

- a mean of 17
- a median of 20
- a range of 27

Find the three numbers.

.....,,

(Total for Question 16 is 3 marks)

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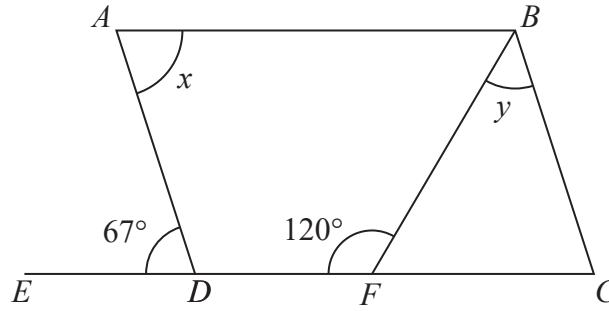


Diagram **NOT** accurately drawn

$ABCD$ is a parallelogram.
 $EDFC$ is a straight line.

(a) (i) Write down the size of angle x .

.....^o

(ii) Give a reason for your answer.

.....
 (2)

(b) Work out the size of angle y .

.....^o
 (2)

(Total for Question 17 is 4 marks)

