AQA GCSE Mathematics Non-Calculator 2024 Foundation Paper 1 Revision Worksheet

Question 11

A window cleaner uses this formula: $C = 2W + 5$

where C = cost, in £, for the customer

W = number of windows to be cleaned.

(a) How much does it cost for 6 windows to be cleaned?

(b) The cost for another customer was £24. Show why this cost **must** be incorrect.

Question 12

Two bags, X and Y, each contain coloured discs.

In bag X, $\frac{7}{20}$ of the discs are red.

In bag Y, $\frac{2}{5}$ of the discs are red.

Which bag has the greater proportion of red discs, X or Y? You **must** show your working.

Question 13

(a) Two friends share £240 in the ratio 1 : 3. Work out the larger share.

(b) A tennis player wins or loses matches in the ratio win : lose = 5 : 9.

What fraction of the matches do they win?

Question 14

Here is a multiplication table:

×	61	63	65	67
61	3721	3843	3965	4087
63	3843	3969	4095	4221
65	3965	4095	4225	4355
67	4087	4221	4355	4489

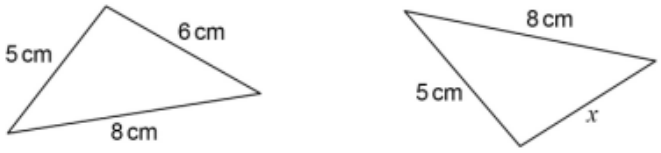
Use the table to answer the following questions.

(a) Work out 3843 ÷ 63

(b) Work out 6.1 × 6.7

(c) Work out 63 × 66

Question 15



These two triangles are congruent (not drawn accurately):

Write down the value of x.

[1 mark]

16. c and d are positive numbers. c is even. d is odd.

Tick a box for each expression:

	Even	Odd	Cannot tell
$c + d$			
$4c$			
$\frac{c}{2}$			

Question 17

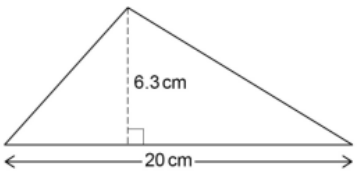
A linear sequence has:

- 1st term = 10
- 1st term + 2nd term = 39

Work out the 5th term.

Question 18

Work out the area of this triangle (not drawn accurately):



Question 19

The vector $\begin{pmatrix} 3 \\ -7 \end{pmatrix}$ translates A to B.

Write down the vector that translates B to A.

Question 20

The attendance for a rugby match is 8400 people to the nearest 100.

(a) Write down the minimum possible attendance.

(b) Write down the maximum possible attendance.

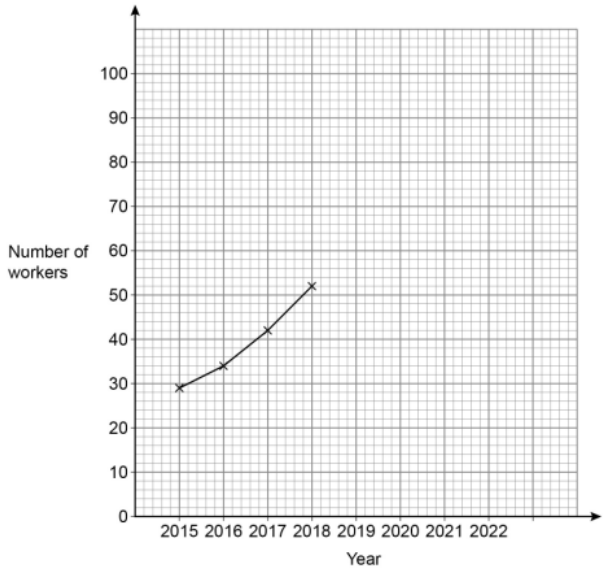
Question 21

The table shows the number of workers at a company in different years:

Year	2015	2016	2017	2018	2019	2020	2021	2022
No.	29	34	42	52	62	70	76	80

A time-series graph is drawn to represent the data. The first four points have been plotted.

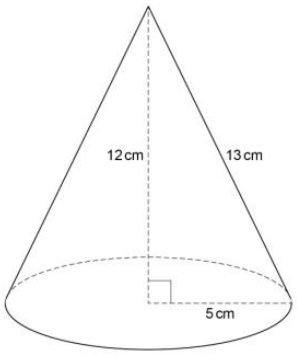
(a) Complete the graph.



(b) Estimate the number of workers at the company in 2023.

Question 22

Here is a cone:



(a)

Curved surface area of a cone = πrl
where r is the radius and l is the slant height

Beth tries to work out the curved surface area in terms of π

Curved surface area of the cone = $\pi \times 5 \times 12$
$= 60\pi \text{ cm}^2$

What mistake has she made?

(b) Adam uses $\pi = 3$ to estimate the area of the base of the cone. Work out his estimate.

(c) Beth uses $\pi = 3.14$ to estimate the area of the base of the cone. Is Beth's estimate more than or less than Adam's estimate?

Tick a box.

More than ☐ Less than ☐

Give a reason for your answer.