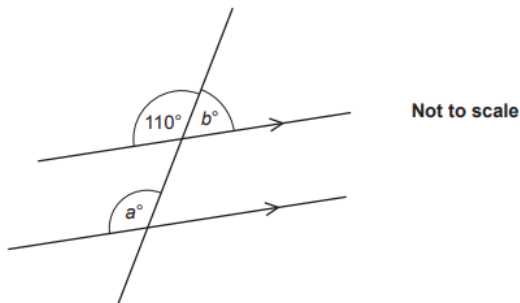


OCR GCSE Mathematics Calculator 2023 Foundation Paper 1 Revision Worksheet

Question 3

The diagram shows a pair of parallel lines.



(a) Write down the value of a .

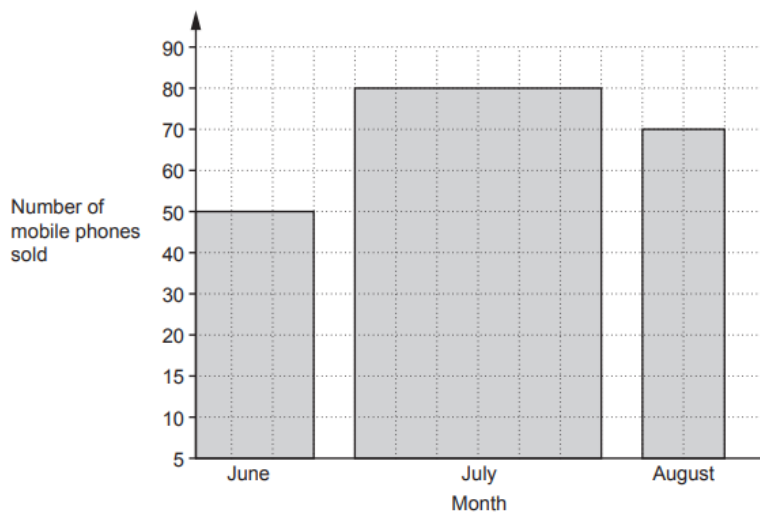
(b) Write down the value of b .

Question 4

Jamie has some empty boxes. Each box can hold 73 pencils. Jamie has 590 pencils. Jamie says that eight boxes are needed to hold all of the pencils. Is Jamie correct? **You must show your working.**

..... because
..... [2]

Question 5



This graph shows the number of mobile phones sold by a shop in June, July and August.

Give two reasons why the graph is misleading.

Question 6

Ashley has these three number tiles: 2, 3, 8.

- (a) Which one of Ashley's tiles shows a cube number? Write the number on the blank tile on the answer line.
- (b) Write down a two-digit prime number that can be made using two of Ashley's tiles.
- (c) Write down the three-digit number closest to 300 that can be made using all three of Ashley's tiles.

Question 7

(a) Simplify: $t + 5t - 4t$

(b) Factorise: $x^2 + 2x$

Question 8

Write the following in order of size, smallest first:

52.9%

 $\frac{530}{1000}$ $\frac{9}{17}$

0.5209

Question 9

A pattern is made out of blue tiles and yellow tiles.

$\frac{1}{3}$ of the tiles are blue. There are 36 yellow tiles. **Work out the total number of tiles.**

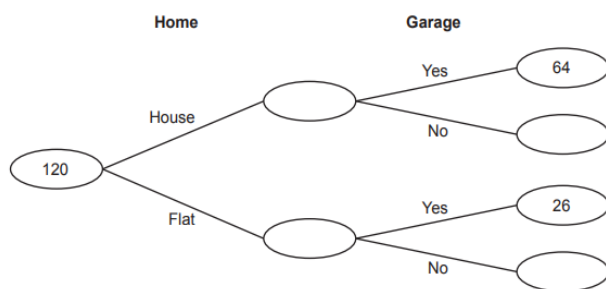
Question 10

Work out, using your calculator:

$$\sqrt{17.5^2 + 60^2}$$

Question 11

120 new homes are built in a village. Each home is either a house or a flat. Each home either has a garage or does not have a garage. 64 of the houses have a garage and 26 of the flats have a garage.

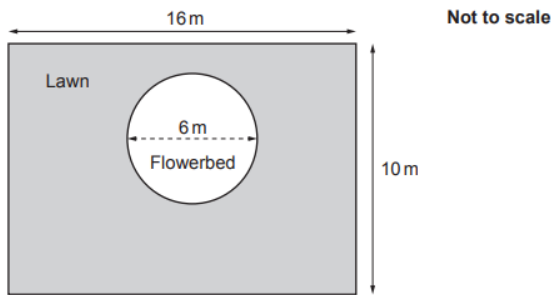


This frequency tree shows the above information.

- (a) $\frac{8}{15}$ of the homes are houses. Complete the frequency tree. [4]
- (b) Show that 75% of the homes have a garage.

Question 12

The diagram shows Kai's garden. The garden is a rectangle, 16 m by 10 m. It has a lawn and a flowerbed. The flowerbed is a circle of diameter 6 m.



Work out the area of Kai's lawn.

Question 13

Here are the ticket prices for a zoo when bought at the gate:

Adult £22 Child £18 Family ticket (2 adults and up to 4 children) £80

(a) Mr and Mrs Khan take their four children to the zoo. They buy their tickets at the gate. How much do Mr and Mrs Khan save by buying a family ticket?

(b) All ticket prices are reduced by 15% if bought online rather than at the gate. Mr and Mrs Morris take their one child to the same zoo. They buy their tickets online. What is the lowest possible total cost of their tickets?