

OCR GCSE Mathematics Calculator 2023 Foundation Paper 1 Revision Worksheet

Question 4

(a) Write down the three factors of 25.

(a) , , and [2]

(b) Write down a square number between 40 and 70.

(b) [1]

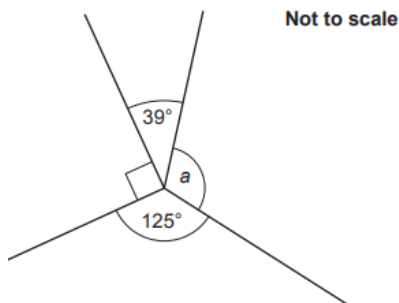
Question 5

Find the number that is halfway between 4.2 and 6.

..... [2]

Question 6

Four lines meet at a point.



Work out the size of angle a .

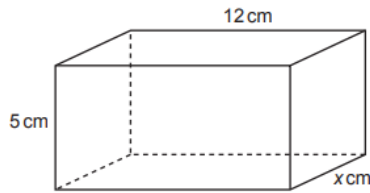
$a = \dots\dots\dots^\circ$ [2]

Question 7

A painter mixes red paint and yellow paint in the ratio 2 : 3. They make a total of 1.5 litres of paint. Work out how much red paint they use. Give your answer in millilitres.

..... ml [3]

Question 8



Not to scale

The volume of the cuboid is 240 cm^3 .

Find the value of x .

The diagram shows a cuboid with dimensions 12cm, 5cm and x cm. The volume of the cuboid is 240 cm^3 . Find the value of x .

$x = \dots\dots\dots$ [3]

Question 9

Heidi and Yoshi compete in the same car race.

Heidi completes the race in 6 hours. Heidi's average speed was 50 miles per hour. Yoshi's average speed was 48 miles per hour. Calculate how long it took Yoshi to complete the race. Give your answer in hours and minutes.

$\dots\dots\dots$ hours $\dots\dots\dots$ minutes [4]

Question 10

Alex and Emma use this recipe to make scones (**16 scones**: 400g flour, 50g sugar, 100g butter, 80g sultanas, 70ml milk, 2 eggs).

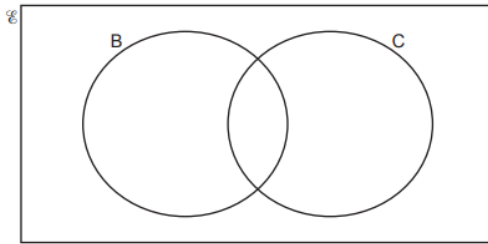
(a) Alex makes 24 scones. He uses a tablespoon to measure the amount of milk he needs. The size of a tablespoon is 15ml. How many tablespoons of milk should Alex use to make 24 scones?

(b) Emma has 1kg of flour and 240g of sultanas. She has lots of all of the other ingredients. Work out the maximum number of scones that Emma can make. You must show your working.

Question 11

140 people are asked if they have a bicycle (B) or a car (C).

- 22 people only have a bicycle.
- 72 people only have a car.
- 29 people have both a bicycle and a car.



(a) Show this information on the Venn diagram.

(b) (i) How many people do not have a bicycle or a car?

(ii) Write your answer in the correct place on the Venn diagram.

(c) One of the 140 people is chosen at random. Work out the probability they have a car.

Question 12

The costs to hire a motorhome are shown below:

- First day £130
- Each extra day £90
- Each mile travelled 60p

Finley hired a motorhome and travelled 560 miles. The total cost of hiring the motorhome was £916. Calculate how many days Finley hired the motorhome for. **You must show your working.**

Question 13

A climber is in a competition. Here are their scores after two events:

- Event 1: 24 out of 30 points
- Event 2: 32 out of 38 points
- Event 3: out of 52 points

The climber's overall score is found by adding the three scores together. Find the score the climber needs in event 3 to achieve 85% of the total points.

Question 14

14 For each graph below, select its possible equation from this list.

A $y = -3$

B $y = x$

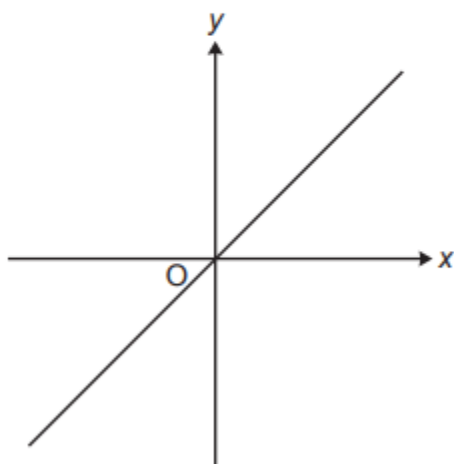
C $y = x + 1$

D $y = x^2$

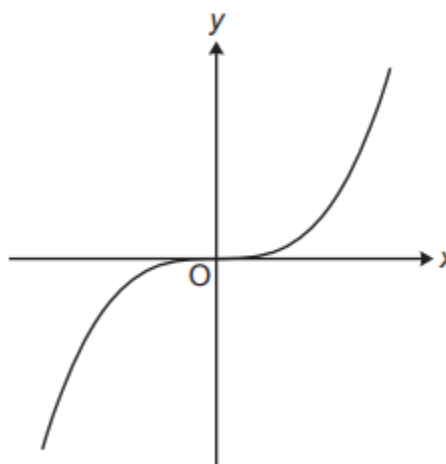
E $x = -3$

F $y = x^3$

Write the letter of the equation beneath each graph.



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