

WRITING A RATIO AS A FRACTION OR LINEAR FUNCTION QUESTIONS

OCR Thursday 05 November 2020- Morning (Non-Calculator) Foundation Tier

1.

18 Charlie and Jasmine share cartons of apple juice.

Charlie drinks $\frac{1}{3}$ of a carton every day.

Jasmine drinks $\frac{2}{5}$ of a carton every day.

Any apple juice left in a carton at the end of the day is used the following day.

The cost of a carton is 70p.

Charlie and Jasmine buy just enough cartons to last them for 10 days.

How much do they spend in total for these cartons?

Give your answer in £.

Show your working.

OCR Tuesday 11 June 2019 – Morning (Calculator) Foundation Tier

2.

2 (a) Write 6 : 14 as a ratio in its simplest form.

(a) : [1]

(b) The ratio 20 : 50 can be written in the form 1 : n .

Find the value of n .

(b) $n =$ [2]

OCR Tuesday 6 November 2018 – Morning (Calculator) Foundation Tier

3.

9 Liu wants to decorate some cakes with shapes.

She has 140 shapes.

Each shape is a star or a heart.

The ratio of the number of stars : number of hearts is 4 : 3.

She wants to put 5 stars and 4 hearts on each cake.

How many cakes can Liu decorate?

Show full working to support your answer.

..... [5]

OCR Sample Question Paper 2 – Morning/Afternoon (Non - Calculator) Foundation Tier

4.

- 13 Eva's camera takes photos with width and height in the ratio 3 : 2.
Photos can be printed in the following sizes.

20 cm by 16 cm

14 cm by 10 cm

24 cm by 16 cm

12 cm by 8 cm

Eva says

Only two of these sizes have the same ratio as my photos!

- (a) Which sizes have the same ratio as her photos?

..... [2]

- (b) Eva has a display board measuring 45 cm by 60 cm.
She wants to display postcards, each measuring 9 cm by 6 cm.

If no postcards overlap, find the maximum number of postcards she can display on the board.

(b) [3]