



EXAM PAPERS PRACTICE

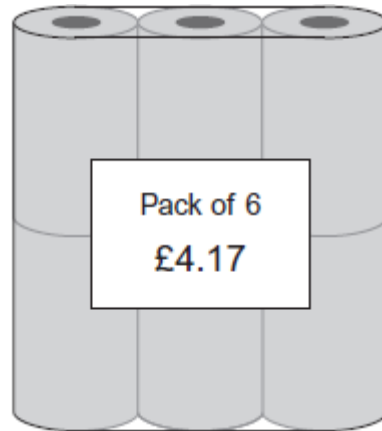
GCSE AQA Math 8300

Fractions Decimal & Percentages

Question Paper

*"We will help you to
achieve A Star "*

Q1. Kitchen rolls are sold in a pack of 2 or a pack of 6



Which pack is the better value for money?
You **must** show your working.

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Answer

(Total 3 marks)

Q2. Here is some information about tourism in 2012

Country visited	Number of tourists (millions)	Total spent by tourists (\$ millions)
France	83.0	53 600
USA	67.0	126 200
Spain	57.7	55 900

(a) How many **more** tourists visited France than Spain?

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Answer million

- (b) 21% of the total spent by tourists in the USA was by Canadians.

Work out the amount spent by Canadian tourists in the USA.

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Answer \$ million

(2)

- (c) In the UK the total spent by tourists was \$36 600 million.
There were 29.3 million tourists.

- Q3.(a)** Lucy thinks people prefer dogs to cats.

She asks dog owners,

“Do you prefer dogs or cats?”

Is the data likely to be biased?
Give a reason for your answer.

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(1)

- (b) Sam asks 30 people,

“Do you prefer dogs or cats?”

One-fifth of the 30 people have no preference.

Twice as many choose cats as choose dogs.

Complete the table.

	Frequency
Dogs	
Cats	
No preference	
	Total = 30

(3)
(Total 4 marks)

Q4.



Bag A



Bag B

Bag A contains £7.20 in 20p coins.

Bag B contains only 5p coins.

The number of coins in bag B is three-quarters of the number of coins in bag A.

How much money is in bag B?

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Answer £

(Total 4 marks)

- Q5.(a)** A shop sells red roses and white roses in the ratio 7 : 2
One day 392 red roses are sold.

How many white roses are sold?

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Answer

(2)

- (b) A different shop sells red roses and white roses in the ratio 8 : 3

What is the probability that a rose, sold at random, is red?

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Answer

(1)

(Total 3 marks)

- Q6.** Alice has £4. Billie has twice as much as Alice.

Billie has two-thirds of the amount Chris has.
The amount Chris has is four-fifths of his age in years.

How old is Chris?

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Answer years

(Total 4 marks)

Q7.A fruit drink is made by mixing juice and lemonade in the ratio

$$\text{juice : lemonade} = 1 : 4$$

Juice costs £6.00 per litre.

Lemonade costs 50p per litre.

(a) Show that 1 litre of the fruit drink costs £1.60 to make.

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(3)

(b) The fruit drink is sold for £2 a litre.

Work out the percentage profit.

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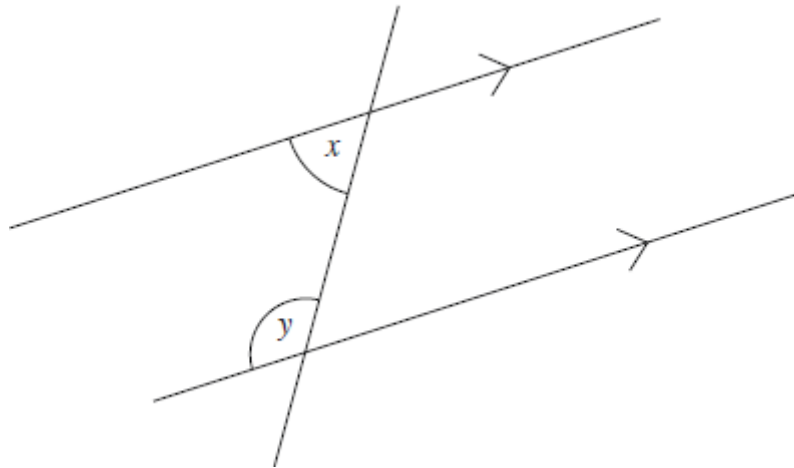
Answer %

(2)

(Total 5 marks)

Q8.

Not drawn accurately



- (a) Use the diagram to write an equation connecting x and y .

Answer

(1)

- (b) The ratio $x : y = 2 : 3$

Use this information to write another equation connecting x and y .

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Answer

(1)

(Total 2 marks)

Q9.(a) Put these in order starting with the smallest.

33.3 $\frac{1}{3}$ -0.3 3.03

Answer,,,

(2)

(b) Jo thinks the difference between -0.3 and 33.3 is 33.

Is she correct?

Tick a box.

☐

Yes

☐

No

Show clearly how you decide.

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(2)
(Total 4 marks)

Q10.

(a) Write $\frac{7}{13}$ as a recurring decimal.

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Answer

(1)

(b) Circle the fraction that is equivalent to 0.4 $\dot{1}$

$\frac{41}{99}$

$\frac{41}{100}$

$\frac{37}{99}$

$\frac{37}{90}$

(1)
(Total 2 marks)

Q11.

- (a) Show that $\frac{4}{9}$ is equivalent to $0.\dot{4}$

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(1)

- (b) Using part (a), or otherwise, write $0.\dot{9}\dot{4}$ as a fraction.

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Answer

(2)
(Total 3 marks)

Q12.

Convert $0.1\dot{7}\dot{2}$ to a fraction in its lowest terms.

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Answer

(Total 3 marks)

Q13.(a) Complete the table.

Fraction	Decimal	Percentage
$\frac{3}{4}$		75%

$\frac{9}{10}$	0.9	
	0.3	30%

(3)

(b) Write $\frac{3}{4}$, 0.9 and 30% in order with the smallest first.

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Answer,,

(1)
(Total 4 marks)

- Q14.** (a) (i) Write $\frac{1}{4}$ as a percentage.

Answer %

(1)

- (ii) Write 30% as a decimal.

Answer

(1)

- (iii) Write $\frac{1}{4}$, 30% and 0.2 in order with the smallest first.

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Answer

(1)

- (b) Complete the following.

(i) $\frac{2}{3} = \frac{\boxed{}}{18}$

(1)

(ii) $\frac{\boxed{}}{4} = \frac{15}{20}$

(1)

- (c) Work out $\frac{3}{8}$ as a decimal.

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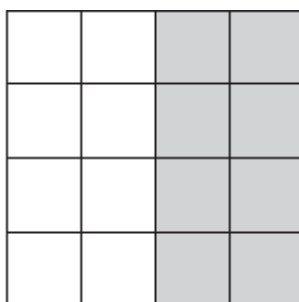
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Answer

(2)
(Total 7 marks)

- Q15.(a)** Here is a square grid.

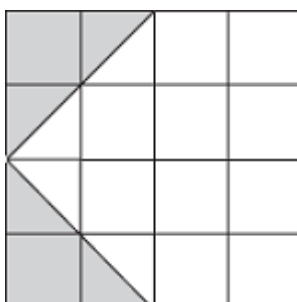


What percentage of the grid is shaded?

Answer %

(1)

- (b) Here is another square grid.



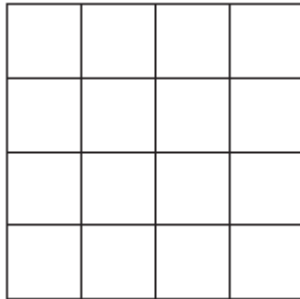
What fraction of the grid is shaded?
Give your answer in its simplest form.

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Answer

(2)

- (c) Shade $\frac{1}{8}$ of this square grid.



(1)
(Total 4 marks)