Relating Ratio to Fractions/Percentages

SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 A bag contains only red and green counters.

red counters : green counters = 3 : 5

What fraction of the counters in the bag are green?

.....

(Total for Question 1 is 1 mark)

2 The ratio of adults to children at a show is 13 : 2

What fraction of the people at the show are adults?

.....

(Total for Question 2 is 1 mark)

3 A driving test centre recorded the number of passes and fails during May.

passes : fails = 6 : 7

What fraction of the driving tests were passes?

.....

(Total for Question 3 is 1 mark)

4 Magnus records the results of his chess games during a tournament.

For his games, wins : draws : losses = 6 : 1 : 2

What fraction of the games does he lose?

.....

(Total for Question 4 is 1 mark)

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5 A country received some medals at a sporting event.

The ratio of gold medals to silver medals to bronze medals was 2 : 1 : 5

(a) What fraction of the medals were silver?

.....

(1)

(b) What fraction of the medals were gold or silver?

.....

(1)

(Total for Question 5 is 2 marks)

6 Students in a school must study one language from French, German or Spanish.

The ratio of students studying French to German to Spanish is 3 : 4 : 8

(a) What fraction of the students study German?

.....

(1)

(b) What fraction of the students do **not** study French?

Give your answer in its simplest form.

.....

(2)

(Total for Question 6 is 3 marks)

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7 Penny throws a coin several times and records whether it lands on heads or tails.

$\frac{3}{7}$ of the throws landed on heads.

Write down the ratio number of heads : number of tails

.....

(Total for Question 7 is 1 mark)

8 Mark takes a maths test.

He gets $\frac{7}{10}$ of the answers correct and the rest incorrect.

For Mark's answers, write down the ratio correct : incorrect

.....

(Total for Question 8 is 1 mark)

9 Three quarters of the students in a class walk to school.

For the students in the class, write down the ratio

students who walk to school : students who do not walk to school

.....

(Total for Question 9 is 1 mark)

10 Tom runs a YouTube channel.

$\frac{1}{9}$ of the channel's viewers are subscribed.

Write down the ratio subscribed viewers : not subscribed viewers

.....

(Total for Question 10 is 1 mark)

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11 A bag contains only blue and yellow counters.

blue counters : yellow counters = 1 : 9

(a) What percentage of the counters in the bag are blue?

..... %

(1)

(b) What percentage of the counters in the bag are yellow?

..... %

(1)

(Total for Question 11 is 2 marks)

12 Gary is practising penalty kicks.

Penalty kicks scored : penalty kicks missed = 2 : 3

What percentage of Gary's penalty kicks were scored?

..... %

(Total for Question 12 is 2 marks)

13 A cinema records which seats are occupied during a film.

Occupied seats : empty seats = 7 : 13

What percentage of the seats were occupied?

..... %

(Total for Question 13 is 2 marks)

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14 45% of the students in a class own a pet.

Write down the ratio of students who own a pet to those who do not own a pet.

Give your answer in its simplest form.

.....

(Total for Question 14 is 2 marks)

15 12% of the flights from an airport were cancelled.

Write down the ratio flights cancelled : flights not cancelled

Give your answer in its simplest form.

.....

(Total for Question 15 is 2 marks)

16 75% of the customers of a restaurant left a tip.

Write the ratio of customers who left a tip to customers who did not leave a tip.

Give your answer in its simplest form.

.....

(Total for Question 16 is 2 marks)

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17 A delivery company records whether its parcels are delivered on time or late.

On Monday $\frac{5}{6}$ of the deliveries were on time and the rest were late.

(a) For Monday, write down the ratio deliveries on time : deliveries late

.....

(1)

On Friday, deliveries on time : deliveries late = 4 : 5

(b) Write down the fraction of deliveries on Friday that were on time.

.....

(1)

On Saturday, 20% of the deliveries were **late**.

(c) For Saturday, write down the ratio deliveries on time : deliveries late

.....

(2)

On Sunday, deliveries on time : deliveries late = 21 : 4

(d) What percentage of the deliveries on Sunday were on time?

..... %

(2)

(Total for Question 17 is 6 marks)

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18 A treasure chest contains only gold and silver coins.

Gold coins: silver coins = 3 : 5

What percentage of the coins are gold?

.....%

(Total for Question 18 is 2 marks)

19 A factory produces milk chocolate, white chocolate and dark chocolate bars.

milk chocolate bars : white chocolate bars : dark chocolate bars = 17 : 12 : 11

What percentage of the bars are milk chocolate?

.....%

(Total for Question 19 is 2 marks)

20 A car manufacturer makes petrol, diesel and electric cars.

One year the factory produces cars in the following ratio:

petrol : diesel : electric = 45 : 44 : 36

What percentage of the cars produced are electric cars?

.....%

(Total for Question 20 is 2 marks)

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21 A fruit farm has apples trees, pears trees and plums trees.

$\frac{1}{4}$ of the fruit trees on the farm are apple trees.

$\frac{2}{3}$ of the fruit trees on the farm are pear trees.

Work out the ratio apple trees : pear trees : plum trees

Give your answer in its simplest form.

.....

(Total for Question 21 is 3 marks)

22 A recycling centre processes paper, plastic and glass.

$\frac{9}{20}$ of the material processed is paper.

$\frac{2}{5}$ of the material processed is plastic.

Work out the ratio paper : plastic : glass

Give your answer in its simplest form.

.....

(Total for Question 22 is 3 marks)

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