

Simplifying and Ordering Fractions

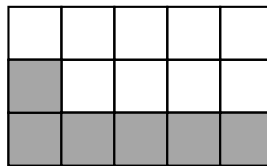
For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **23**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

1 Here is a shape.



(a) Write down the fraction of the shape that is shaded.

.....
(1)

(b) Write your answer to (a) in its simplest form.

.....
(1)
(Total for Question 1 is 2 marks)

2 Write $\frac{24}{36}$ in its simplest form.

.....
(1)
(Total for Question 2 is 1 mark)

- 3 Write the missing numbers.

$$\frac{3}{4} = \frac{\boxed{}}{20} = \frac{18}{\boxed{}}$$

(2)

(Total for Question 3 is 2 marks)

- 4 Exactly two of these fractions are equal to $\frac{3}{5}$

$$\frac{6}{9} \quad \frac{9}{15} \quad \frac{15}{20} \quad \frac{12}{20} \quad \frac{10}{15}$$

Write down these two fractions.

.....
(1)

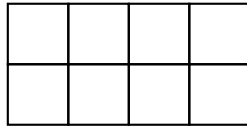
(Total for Question 4 is 1 mark)

- 5 Explain why $\frac{3}{8}$ and $\frac{9}{24}$ are equivalent.

(1)

(Total for Question 5 is 1 mark)

- 6 Shade $\frac{3}{4}$ of this shape.



(1)

(Total for Question 6 is 1 mark)

- 7 (a) Write $\frac{23}{6}$ as a mixed number.

.....
(1)

- (b) Write $4\frac{2}{5}$ as an improper fraction.

.....
(1)

(Total for Question 7 is 2 marks)

- 8** Write the following fractions in order of size.
Start with the smallest fraction.

$$\frac{9}{20} \quad \frac{2}{5} \quad \frac{1}{2} \quad \frac{3}{10}$$

.....
(2)

(Total for Question 8 is 2 marks)

- 9** Show that $\frac{7}{10}$ is exactly halfway between $\frac{3}{5}$ and $\frac{4}{5}$

(2)

(Total for Question 9 is 2 marks)

- 10** Which is larger, $\frac{4}{7}$ or $\frac{5}{9}$?
You must show your working.

.....
(2)

(Total for Question 10 is 2 marks)

- 11** There are 45 cars in a car park. 27 of the cars are silver.
Write down the fraction of the cars that are silver.
Give your answer in its simplest form.

.....
(2)

(Total for Question 11 is 2 marks)

- 12** There are 60 students in a year group.
36 of the students walk to school.
What fraction of the students do **not** walk to school?
Give your answer in its simplest form.

.....
(2)

(Total for Question 12 is 2 marks)

- 13** Which one of $\frac{5}{6}$, $\frac{7}{8}$ and $\frac{11}{10}$ is nearest to 1?
You must show all your working.

.....
(3)

(Total for Question 13 is 3 marks)
