

SCORE
A

Numbers

With Classified
answer book

8

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9- Adding and subtracting fractions

1.

$$\frac{4}{16}$$

$$\frac{2}{8}$$

$$\frac{15}{60}$$

$$\frac{3}{9}$$

One of these fractions is **not**

$$\frac{1}{4}$$

equivalent to Write down this fraction.

Here are two fractions.

$$\frac{7}{5}$$

$$\frac{5}{7}$$

Work out which of the fractions is closer to 1
You must show all your working.

2. Here are some fractions.

$$\frac{9}{12}$$

$$\frac{6}{8}$$

$$\frac{18}{24}$$

$$\frac{10}{16}$$

$$\frac{15}{20}$$

One of these fractions is **not**
equivalent to Which fraction?

$$\frac{3}{4}$$

3. (a) Work out $\frac{1}{3} + \frac{1}{2}$

(b) Work out $\frac{3}{4} - \frac{1}{5}$

4. (a) Work out the value of $\frac{2}{3} + \frac{3}{4}$

Give your answer as a fraction in its simplest form.

(b) Work out the value of $1\frac{2}{3} + 2\frac{3}{4}$

Give your answer as a fraction in its simplest form.

5. Work out $5\frac{2}{3} - 2\frac{3}{4}$

6. a) Sam wrote the calculation:

$$\frac{1}{4} + \frac{1}{4} = \frac{2}{8}$$

Is he correct? Yes No

Explain your answer.

b) Think about the fraction $\frac{1}{5}$

How many of them add to make 1?

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c) Is the answer to $11 \times 3\frac{1}{2}$ a whole number?

Yes No

Explain your answer.

7. Look at these numbers.

5

$7\frac{1}{2}$

9

$12\frac{1}{2}$

17

$22\frac{1}{2}$

(a) Which two of these numbers add up to 20?

(b) Which two of these numbers have a difference of 10?

8. John is paid on the first day of every month.

He spends $\frac{1}{3}$ of his pay on food and $\frac{1}{4}$ of his pay on rent.

What fraction of his pay will John have left?

Write your answer in its simplest form.

9. Sarah has started reading a new book.

On Saturday she reads $\frac{2}{15}$ of the book.

On Sunday she reads a further $\frac{1}{3}$ of the total number of pages in the book.

On Monday she reads another $\frac{1}{5}$ of the total number of pages in the book.

On Tuesday she finishes the book.

What fraction of the book did she read on Tuesday?

Write your answer in its simplest form.

10. A conservation group try to estimate the population of different types of trees that are found in a nearby forest:

$\frac{1}{18}$ of the trees are oak $\frac{2}{9}$ of the trees are beech and $\frac{1}{4}$ of the trees are pine.

(a) What fraction of the trees in the forest are not oak, beech or pine?

(b) The group estimates there are 720 trees in the forest.
How many of these trees are not oak or pine?

11. A rectangular field is measured to be $\frac{9}{4}$ km by $\frac{11}{8}$ km.

What is the perimeter of the field?

Give your answer as a mixed fraction.

12. The passenger list on a cruise ship shows that:

$\frac{1}{10}$ of the passengers come from Italy.

$\frac{1}{4}$ of the passengers come from Sweden.

And 520 passengers come from the UK.

How many passengers are there all together?

13. Lethna worked out $\frac{2}{5} + \frac{1}{2}$

She wrote:

$$\frac{2}{5} + \frac{1}{2} = \frac{2}{10} + \frac{1}{10} = \frac{3}{10}$$

The answer of $\frac{3}{10}$ is wrong.

Describe one mistake that Lethna made.

14. Emma has done some calculations.

Explain how you know the answer is wrong without working out the correct answer.

$$\frac{3}{4} + \frac{2}{3} = \frac{5}{7}$$