

Forming fractions



Write a fraction for a shaded diagram or a real-world “part out of whole” description.

Name _____

Date _____

Part out of whole

A fraction is written as $\frac{\text{numerator}}{\text{denominator}}$: the numerator is the number of parts you have, and the denominator is the total number of equal parts in the whole. You do not need to simplify – just write the count you have out of the total.

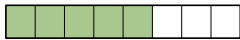
Worked example A ribbon is cut into 10 equal pieces. 4 pieces are used. Form the fraction used.



4 pieces used out of 10 equal pieces.

Fraction used = $\frac{4}{10}$.

1. Write the shaded fraction.



Solution

$\frac{5}{8}$

2. Write the shaded fraction.



Solution

$\frac{4}{6}$

3. A cake is cut into 12 equal slices. You eat 5. What fraction did you eat?

Solution

$\frac{5}{12}$

4. What fraction is shaded (out of 100)?



Solution

$\frac{34}{100}$

5. A bag has 15 sweets. 6 are red. What fraction are red?

Solution

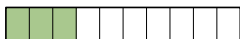
$\frac{6}{15}$

6. A class of 28 students has 16 boys. What fraction are boys?

Solution

$\frac{16}{28}$

7. Write shaded, then unshaded.



Solution

Shaded $\frac{3}{10}$. Unshaded $\frac{7}{10}$.

8. Write shaded, then unshaded.



Solution

Shaded $\frac{2}{9}$. Unshaded $\frac{7}{9}$.

9. A fridge has 20 eggs. 14 are used. Form the fraction used, then remaining.

Solution

Used $\frac{14}{20}$. Remaining $\frac{6}{20}$.

Forming fractions (continued)



Write a fraction for a shaded diagram or a real-world “part out of whole” description.

Name _____

Date _____

10. What fraction is shaded (out of 100)?



Solution

$$\frac{58}{100}$$

11. A survey of 50 people found 32 like pizza. Form the fraction who like pizza.

Solution

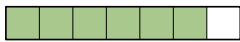
$$\frac{32}{50}$$

12. A car park has 80 spaces. 55 are full. Form the fraction of spaces empty.

Solution

$$80 - 55 = 25 \text{ empty. } \frac{25}{80}.$$

13. Write shaded, then unshaded.



Solution

Shaded $\frac{6}{7}$. Unshaded $\frac{1}{7}$.

14. A recipe uses 4 eggs from a carton of 6. Form the fraction used, then remaining.

Solution

Used $\frac{4}{6}$. Remaining $\frac{2}{6}$.

15. Explain what the numerator and denominator each mean, using an example.

Solution

Numerator = parts you have; denominator = total equal parts. E.g. in $\frac{3}{8}$, 3 is the numerator, 8 the denominator.

16. A school has 450 students: 240 are girls, the rest are boys. Form the fraction who are boys.

Solution

$$450 - 240 = 210 \text{ boys. } \frac{210}{450}.$$

17. A jar has 60 marbles: 25 red, 20 blue, 15 green. Form the fraction that is NOT red.

Solution

$$20 + 15 = 35 \text{ not red. } \frac{35}{60}.$$

18. A charity sold 126 raffle tickets from a batch of 300. Form the fraction sold.

Solution

$$\frac{126}{300}$$