

Fractions: Parts, Equivalence and Comparing

Ages 11–12 · Maths

Name _____ Class _____ Date _____

A Key terms: match each term to its meaning

Write the letter of the correct meaning in the box next to each term.

1 Fraction	☐	A Fractions that show the same amount, such as $\frac{1}{2}$, $\frac{2}{4}$ and $\frac{4}{8}$.
2 Numerator	☐	B A fraction with a numerator of 1, such as $\frac{1}{2}$, $\frac{1}{3}$ or $\frac{1}{10}$.
3 Denominator	☐	C A number that describes equal parts of a whole, written with a numerator above a denominator.
4 Unit fraction	☐	D A fraction whose numerator and denominator have no common factor except 1.
5 Equivalent fractions	☐	E The bottom number of a fraction: how many equal parts the whole is split into.
6 Simplest form	☐	F A shared denominator that two or more fractions are rewritten with, so they can be compared or added.
7 Common denominator	☐	G The top number of a fraction: how many of the equal parts we mean.

B Quick quiz

Circle the best answer, write its letter, then explain your choice in a few words.

1 What does the denominator of $\frac{3}{8}$ tell you?

- a) How many equal parts the whole is split into b) How many parts are shaded
c) How big the whole is d) How many wholes there are

Answer: _____ Why? _____

2 Which fraction is equivalent to $\frac{2}{3}$?

- a) $\frac{4}{5}$ b) $\frac{6}{9}$
c) $\frac{3}{4}$ d) $\frac{4}{9}$

Answer: _____ Why? _____

3 Which is smaller, $\frac{1}{6}$ or $\frac{1}{4}$?

- a) $\frac{1}{6}$, because the whole is split into more parts b) $\frac{1}{4}$, because 4 is smaller than 6
c) They are the same size d) You cannot compare them

Answer: _____ Why? _____

4 What is $\frac{2}{5}$ of 30?

- a) 6 b) 10
c) 12 d) 15

Answer: _____ Why? _____

5 Which list puts $\frac{1}{2}$, $\frac{3}{8}$ and $\frac{5}{8}$ in order, smallest first?

- a) $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$ b) $\frac{1}{2}$, $\frac{3}{8}$, $\frac{5}{8}$
c) $\frac{5}{8}$, $\frac{1}{2}$, $\frac{3}{8}$ d) $\frac{3}{8}$, $\frac{5}{8}$, $\frac{1}{2}$

Answer: _____ Why? _____

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Answer key for teachers · Ages 11–12 · Maths

A Key terms

1 Fraction	C	A number that describes equal parts of a whole, written with a numerator above a denominator.
2 Numerator	G	The top number of a fraction: how many of the equal parts we mean.
3 Denominator	E	The bottom number of a fraction: how many equal parts the whole is split into.
4 Unit fraction	B	A fraction with a numerator of 1, such as $\frac{1}{2}$, $\frac{1}{3}$ or $\frac{1}{10}$.
5 Equivalent fractions	A	Fractions that show the same amount, such as $\frac{1}{2}$, $\frac{2}{4}$ and $\frac{4}{8}$.
6 Simplest form	D	A fraction whose numerator and denominator have no common factor except 1.
7 Common denominator	F	A shared denominator that two or more fractions are rewritten with, so they can be compared or added.

B Quick quiz

1 a) How many equal parts the whole is split into

The denominator, 8, says the whole is split into 8 equal parts. The numerator, 3, says how many of those parts we mean.

2 b) $\frac{6}{9}$

Multiplying the top and the bottom of $\frac{2}{3}$ by 3 gives $\frac{6}{9}$, which shows the same amount. Adding the same number to top and bottom (as in $\frac{3}{4}$) does not give an equivalent fraction.

3 a) $\frac{1}{6}$, because the whole is split into more parts

Splitting the same whole into 6 parts makes each part smaller than splitting it into 4, so $\frac{1}{6}$ is less than $\frac{1}{4}$.

4 c) 12

Divide 30 by the denominator, 5, to get 6 for one fifth. Multiply by the numerator, 2, to get 12.

5 a) $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$

Write $\frac{1}{2}$ as $\frac{4}{8}$. Then the numerators in order are 3, 4, 5, so the order is $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$.