

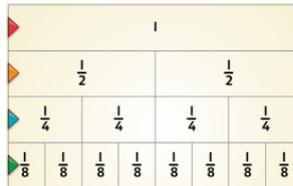
Fractions and Decimals Progression Map Year 5

1. Compare and order fractions with the same denominator.

Example: $\frac{7}{8} > \frac{5}{8}$

2. Identify, name and write equivalent fractions, including tenths and hundredths.

Example: $\frac{4}{10} = \frac{2}{5}$



3. Recognise and use tenths and hundredths and relate them to decimal equivalents.

Example:

$$\frac{3}{5} = \frac{6}{10} = 0.6$$

4. Find fractions of 2 and 3 digit numbers.

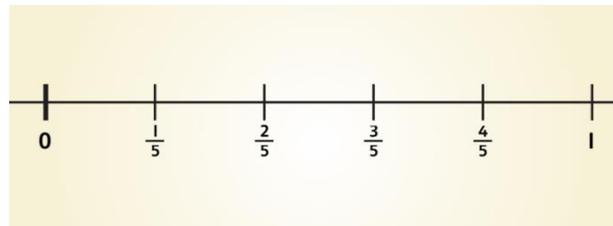
Example: $\frac{2}{3}$ of 60 ($60 \div 3$) $\times 2 = 40$

5. Compare and order fractions, including mixed numbers, whose denominators are all multiples of the same number.

Example: $\frac{41}{4}$, $\frac{43}{8}$, $\frac{47}{16}$

6. Place fractions on a number line and count in steps of a given fraction.

Example:



7. Recognise mixed numbers and improper fractions and convert from one form to the other.

Example: $\frac{20}{7} = 2\frac{6}{7}$ ($20 \div 7 = 2$ remainder 6)

8. Multiply proper fractions by whole numbers in a practical or real-life context.

Example: Fred has a one seventh share of £42. How much does he receive? = $\frac{1}{7}$ of 42 = ($42 \div 7$) = 6

9. Reduce fractions to their simplest form.

Example: $\frac{8}{16} = \frac{1}{2}$

10. Convert improper fractions (top-heavy fractions) to mixed numbers (a whole number and fraction).

Example: $\frac{14}{4} = 3\frac{1}{2}$ ($14 \div 4 = 3$ remainder 2 or $\frac{2}{4} = \frac{1}{2}$ $\frac{16}{6} = 2\frac{2}{3}$)

11. Convert mixed numbers (a whole number and a fraction) to improper fractions (top-heavy fraction).

Example: $4\frac{5}{7} = (4 \times 7 + 5) \frac{1}{7} = \frac{33}{7}$

12. Read and write decimal numbers as fractions.

Example: $0.71 = \frac{71}{100}$

13. Multiply proper fractions by whole numbers.

Example: $2 \times \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$



14. Add and subtract fractions with the same denominator and denominators that are multiples of the same whole number.

Example:



15. Write percentages as a fraction with denominator 100 and as a decimal.

Example: $15\% = \frac{15}{100} = 0.15$

16. Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.

Example: $0.5 = \frac{1}{2} = 50\%$ $\frac{1}{4}$ of 28 children like swimming. What is this as a percentage?
How many children is this?