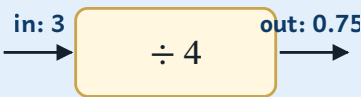


Converting fractions to decimals

MODULE 3 · FRACTIONS, DECIMALS AND PERCENTAGES NUMBER

A fraction means **divide**: the top by the bottom. Some give exact decimals, others repeat.

- $3/4 = 3 \div 4 = 0.75$.
- $1/3 = 0.333...$ (it repeats).



CONVERT 3/4 TO A DECIMAL

$$\begin{array}{r} 0.75 \\ 4 \overline{) 3.00} \\ \underline{3} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

- 1 A fraction means divide: $3 \div 4$.
- 2 3 won't divide by 4, so write 3.00 and keep going.
- 3 $30 \div 4 = 7 \text{ r } 2$; $20 \div 4 = 5 \rightarrow 0.75$.

HOW TO ANSWER TODAY

- **Fraction · decimal · %**. Divide top by bottom to get a decimal. Multiply a decimal by 100 to get a percent. Write fractions in lowest terms.
 $1/4 = 0.25 = 25\%$ · $0.6 = 60\% = 3/5$

WARM-UP

Complete the fraction → decimal table.

	Decimal
a. $1/2$	
b. $1/4$	
c. $3/4$	
d. $1/5$	
e. $3/10$	

PRACTICE

- 1 On the coach trip to the Burren, **$3/5$** of the 5th class pupils choose to bring a packed lunch from home. Write this fraction as a decimal and as a percentage.
- 2 At granny's Sunday dinner, Saoirse notices that **20%** of the cousins around the table chose mashed potato instead of roast. Write **20%** as a fraction in its lowest terms and as a decimal.

CHALLENGE

- 1 On the school tour to the Cliffs of Moher, **75%** of 5th class bring a packed lunch from home. Write **75%** as a fraction in its lowest terms and as a decimal.
- 2 In Mr Byrne's 5th class library, **0.75** of the books borrowed last week were returned by Friday. Write **0.75** as a fraction in its lowest terms and as a percentage.