

## Fractions

### How do I divide a fraction by a whole number or vice versa?

- The whole number must be rewritten so that it looks like a fraction.

*You can make any whole number look like a fraction by writing a denominator of 1 underneath it.*

#### Example

Without altering the value of the whole number 5, turn it into a fraction.

$$5 \text{ becomes } \frac{5}{1}$$

#### Example

$$4 \div \frac{1}{8} = ?$$

First, make the 4 look like a fraction:  $\frac{4}{1} \div \frac{1}{8} = ?$

$$\text{Invert: } \frac{4}{1} \div \frac{8}{1} = ?$$

$$\text{Multiply: } \frac{4}{1} \times \frac{8}{1} = ?$$

$$\frac{4}{1} \times \frac{8}{1} = \frac{4 \times 8}{1 \times 1} = \frac{32}{1} = \boxed{32}$$

#### Example

$$\frac{7}{8} \div 14 = ?$$

First, make the 14 look like a fraction:  $\frac{7}{8} \div \frac{14}{1} = ?$

$$\text{Invert: } \frac{7}{8} \div \frac{1}{14} = ?$$

$$\text{Multiply: } \frac{7}{8} \times \frac{1}{14} = ?$$

$$\frac{\cancel{7}^1}{8} \times \frac{1}{\cancel{14}_2} = \frac{1 \times 1}{8 \times 2} = \boxed{\frac{1}{16}}$$