

SIMPLE OPERATIONS

- The sum of a and b is written: $a + b$
- The difference of a and b is written: $a - b$
- The product of a and b is written: $a \times b$
which is often simplified as ab
- The quotient of a and b is written: $a \div b$
which is often simplified as $\frac{a}{b}$
- $a \times a$ is noted a^2 (we say “ a square”)

CANCELLING COMMON FACTORS

Fractions must be simplified whenever possible, by **cancelling common factors**.

example 1:

$$\frac{\overset{3}{\cancel{15}x}\cancel{y}}{\overset{4}{\cancel{20}}\cancel{y}z} = \frac{3x}{4z}$$

example 2:

$$\frac{10ab}{15bc} = \frac{\overset{2}{\cancel{10}} \times a \times \cancel{b}}{\overset{3}{\cancel{15}} \times \cancel{b} \times c} = \frac{2a}{3c}$$

example 3:

$$\frac{18x^2y}{8xz} = \frac{\overset{9}{\cancel{18}} \times \cancel{x} \times x \times y}{\overset{4}{\cancel{8}} \times \cancel{x} \times z} = \frac{9xy}{4z}$$