

Factorizing to Cancel

Sometimes you need to factorise before you can simplify

Example 1: Simplify $\frac{x^2 + 7x + 12}{x + 3}$

$$= \frac{(x + 3)(x + 4)}{x + 3}$$
$$= x + 4$$

Example 2: Simplify $\frac{2x^2 + 5x - 12}{2x^2 - 7x + 6}$

$$= \frac{(2x - 3)(x + 4)}{(x - 2)(2x - 3)}$$
$$= \frac{x + 4}{x - 2}$$