

Algebraic Fractions

1)

Express

$$\frac{2}{x-1} + \frac{4}{x+2} \quad x \neq 1, x \neq -2$$

as a single fraction in its simplest form.

3

2)

Express

$$\frac{s^2}{t} \times \frac{3t}{2s}$$

as a fraction in its simplest form.

2

3)

Simplify

$$\frac{3x-15}{(x-5)^2}$$

2

4)

Express

$$\frac{3}{x} - \frac{4}{x+1}, \quad x \neq 0, x \neq -1$$

as a single fraction in its simplest form.

3

5)

Express as a single fraction

$$\frac{a}{b} + \frac{b}{a}, \quad a \neq 0, b \neq 0.$$

2

6)

Simplify $\frac{(x+4)^2}{x^2-x-20}$.

3

7)

Simplify $\frac{x^6}{y^2} \times \frac{y^3}{x^3}$.

2

8)

Express

$$\frac{2}{(x-4)} + \frac{5}{x}, \quad x \neq 0, x \neq 4,$$

as a single fraction in its simplest form.

3