
Algebraic Methods: Algebraic Fractions 2 - Edexcel Past Exam Questions

1. Express

$$\frac{2(3x+2)}{9x^2-4} - \frac{2}{3x+1}$$

as a single fraction in its simplest form.

(4)
June 12 Q1

2.

$$h(x) = \frac{2}{x+2} + \frac{4}{x^2+5} - \frac{18}{(x^2+5)(x+2)}, \quad x \geq 0.$$

(a) Show that $h(x) = \frac{2x}{x^2+5}$.

(4)
Jan 13 Q7(edited)

3. Express

$$\frac{3x+5}{x^2+x-12} - \frac{2}{x-3}$$

as a single fraction in its simplest form.

(4)
June 13(R) Q1

4. Express

$$\frac{3}{2x+3} - \frac{1}{2x-3} + \frac{6}{4x^2-9}$$

as a single fraction in its simplest form.

(4)
June 14(R) Q1



5. Given that k is a **negative** constant and that the function $f(x)$ is defined by

$$f(x) = 2 - \frac{(x-5k)(x-k)}{x^2 - 3kx + 2k^2}, \quad x \geq 0,$$

- (a) show that $f(x) = \frac{x+k}{x-2k}$. (3)

June 15 Q9 (edited)

6. Express $\frac{4x}{x^2-9} - \frac{2}{x+3}$ as a single fraction in its simplest form. (4)

June 17 Q1
