

Past Paper Questions – Algebraic Fractions

15. (a) Factorise $2x^2 + 7x + 5$

.....
(2)

(b) Write as a single fraction in its simplest form

$$\frac{3}{x+1} + \frac{5x}{2x^2 + 7x + 5}$$

16. Write as a single fraction in its simplest form.

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

17. (a) Factorise

$$9x^2 - 6x + 1$$

.....
(2)

(b) Simplify

$$\frac{6x^2 + 7x - 3}{9x^2 - 6x + 1}$$

(b) Solve $\frac{2}{x} + \frac{3}{2x} = \frac{1}{3}$

$x =$
(2)

17. (a) Factorise

$$x^2 + 3x + 2.$$

.....
(1 mark)

(b) Write as a single fraction in its simplest form

$$\frac{3}{x+1} + \frac{3x}{x^2 + 3x + 2}$$

18. Solve the equation

$$\frac{7}{x+2} + \frac{1}{x-1} = 4$$