

ALGEBRAIC FRACTIONS – PRACTICE QUESTIONS



metatutor

1.

Simplify fully $\frac{6x+15}{8x+20}$

2.

Simplify fully $\frac{12x-16}{3x^2-4x}$

3.

Simplify fully $\frac{x^2+4x}{x^2+6x+8}$

4.

Simplify fully $\frac{x^2-x-12}{x^2+9x+18}$

5.

Simplify fully $\frac{9x+18}{x^2+4x+4}$

6.

Simplify fully $\frac{x^2+2x-24}{x^2-16}$

7.

Simplify fully $\frac{2x^2+13x+20}{2x^2+x-10}$

8.

Simplify fully $\frac{x^2+x}{x^2+x-2} \times \frac{x^2-3x-10}{x^2-4x-5}$

9.

Simplify fully $\frac{2x^2+7x+3}{4x^2+2x} \div \frac{3x^2+7x-6}{6x^2-4x}$

10.

Simplify fully $\frac{3x^2+13x+12}{x^2-9} \times \frac{x^2+2x-15}{4x^2+17x-15}$

11.

Simplify fully $\frac{4x^2-9}{6x^2+11x+3} \div \frac{4x^2-17x-15}{3x^2-14x-5}$

12.

Simplify fully $\frac{4x^3+10x^2}{4x^2+4x-15} - \frac{3x^2-18x}{2x^2-15x+18}$

13.

Simplify fully $\frac{4x^3-16x}{3x^2+11x+10} \times \frac{9x^2-25}{3x^2-11x+10}$

14.

Show that, for all values of x , $\frac{x^2-6x}{x^2-4x-12} + \frac{6x+8}{3x^2+10x+8} = 1$