

SKILLS CHECK

QUESTION 1

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

QUESTION 2

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

QUESTION 3

Express $x^2 + 6x - 10$ in the form $(x + a)^2 + b$

QUESTION 4

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

QUESTION 5

Solve simultaneously $x^2 + y^2 = 25$ $x - y = 7$

WEEK 1

SKILLS CHECK

QUESTION 1

Solve $\frac{4}{3}(x + 1) = \frac{4x}{5} + 4$

QUESTION 2

Simplify $\frac{4}{x+2} - \frac{2}{x+1}$

QUESTION 3

Express $x^2 - 10x + 10$ in the form $(x + a)^2 + b$

QUESTION 4

Simplify $\frac{x^2 - 36}{2x - 12}$

QUESTION 5

Solve simultaneously $x^2 + y^2 = 10$ $x - y = 2$

WEEK 2

SKILLS CHECK

QUESTION 1

Solve $\frac{3x}{2} + 10 = \frac{1}{3}(11 - 5x)$

QUESTION 2

Simplify $\frac{4}{x-3} - \frac{2}{x-1}$

QUESTION 3

Express $x^2 - 2x - 1$ in the form $(x + a)^2 + b$

QUESTION 4

Simplify $\frac{2x^2 - x - 6}{x - 2}$

QUESTION 5

Solve simultaneously $x^2 + y^2 - x - y = 6$ $x + y = 4$

WEEK 3

SKILLS CHECK

QUESTION 1

Solve $\frac{6-4x}{5} = \frac{3x+7}{2}$

QUESTION 2

Simplify $\frac{2x}{x-3} + \frac{2}{x+5}$

QUESTION 3

Express $2x^2 + 12x + 5$ in the form $a(x + b)^2 + c$

QUESTION 4

Simplify $\frac{6x^2+5x-6}{2x^2+x-3}$

QUESTION 5

Solve simultaneously $x^2 + y^2 = 8$ $x - y = 4$

SKILLS CHECK

QUESTION 1

Solve $\frac{3}{7}(4x - 7) = \frac{1}{2}(30 - 2x) + 1$

QUESTION 2

Simplify $\frac{2x}{(x-1)^2} - \frac{1}{x-1}$

QUESTION 3

Express $2x^2 - 4x + 1$ in the form $a(x + b)^2 + c$

QUESTION 4

Simplify $\frac{12x^2 + 13x - 4}{16x^2 - 1}$

QUESTION 5

Solve simultaneously $x^2 + y^2 = 20$ $x + y = 6$

SKILLS CHECK

QUESTION 1

Solve $\frac{1}{6}(7x - 2) = \frac{1}{5}(6x - 1)$

QUESTION 2

Simplify $\frac{2x+1}{x+1} - \frac{2x}{x+2}$

QUESTION 3

Express $4x^2 - 20x + 2$ in the form $(ax + b)^2 + c$

QUESTION 4

Simplify $\frac{25x - 4x^2 - 25}{4x^2 + 15x - 25}$

QUESTION 5

Solve simultaneously $x^2 + y^2 - xy = 37$ $x + y = 1$

SKILLS CHECK

QUESTION 1

$$\text{Solve } \frac{4}{9}(5x + 3) = \frac{4x}{3} + 4$$

QUESTION 2

$$\text{Simplify } \frac{2x}{(x+3)^2} - \frac{3x}{2(x+3)}$$

QUESTION 3

$$\text{Express } 4x^2 + 40x - 1 \text{ in the form } (ax + b)^2 + c$$

QUESTION 4

$$\text{Simplify } \frac{12x^2 + 10x - 12}{8x^2 - 4x - 24}$$

QUESTION 5

$$\text{Solve simultaneously } x^2 + y^2 + xy - x - y = 16 \quad x + y = 5$$