Quadratic Equations

Express the given equations in quadratic form as $ax^2 + bx + c = 0$.

1) $3x + 4 = \dfrac{2}{x}$

2) $\dfrac{1}{2x^2} = \dfrac{5}{3}$

3) $x(5 - 2x) = 1 - x^2$

4) $\dfrac{6}{x} + 5x = 3$

5) $\dfrac{2x}{x + 1} + \dfrac{x}{3x - 4} = 0$

6) $1 + 3x^2 = 6 - x - x^2$

7) $(4x - 5)^2$

8) $2x = \dfrac{1}{x}(4 + x^2)$

Quadratic Equations

Answer key

Express the given equations in quadratic form as $ax^2 + bx + c = 0$.

1) $3x + 4 = \dfrac{2}{x}$

$3x^2 + 4x - 2 = 0$

2) $\dfrac{1}{2x^2} = \dfrac{5}{3}$

$5x^2 - 4 = 0$

3) $x(5 - 2x) = 1 - x^2$

$x^2 - 5x + 1 = 0$

4) $\dfrac{6}{x} + 5x = 3$

$5x^2 - 3x + 6 = 0$

5) $\dfrac{2x}{x + 1} + \dfrac{x}{3x - 4} = 0$

$7x^2 - 7x = 0$ or $x^2 - x = 0$

6) $1 + 3x^2 = 6 - x - x^2$

$4x^2 + x - 5 = 0$

7) $(4x - 5)^2$

$16x^2 - 40x + 25 = 0$

8) $2x = \dfrac{1}{x}(4 + x^2)$

$x^2 - 4 = 0$