Solving Quadratics Using the Formula

Solve these quadratic equations, giving your answers to 2 decimal places.

(a) $x^2 + 5x + 1 = 0$

(b) $x^2 - 5x + 1 = 0$

(c) $2x^2 + 5x + 1 = 0$

(d) $2x^2 - 7x - 6 = 0$

(e) $4x^2 + x - 6 = 0$

(f) $4x^2 + 9x - 2 = 0$

Solve these quadratic equations, giving your answers to 2 decimal places.

(a) $2x^2 = 5x + 6$

(b) $x^2 + 7x = 2$

(c) $5x^2 = 11x + 3$

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

Solve these quadratic equations, leaving your answers in surd form.

(a) $4x^2 - 9x + 4 = 0$

(b) $7x^2 + 3x = 2$

(c) $x^2 + 3x - 6 = 0$

(d) $7x^2 + 12x + 2 = 0$

(a) The answers to a quadratic equation are $x = \frac{3 \pm \sqrt{37}}{2}$.

What is the quadratic equation?

(b) Solve the equation

$$x + \frac{3}{x} = 7$$

Give your answers correct to 2 decimal places.

(c) What is special about the solutions to the equation

$$4x^2 - 4x + 1 = 0$$