Solving Quadratics

Solve:

$$4x^2 = 1$$

Solve by factoring:

$$9x^2 = 10x$$

Solve by factoring:

$$x^2 - 5x = -6$$



Can this be factored? Try.



Solve by completing the square.

$$2x^2 = -7x + 30$$



Challenge!

Solve by completing the square.

Take the first step in EACH equation before taking the next step on the left side...

Take one step here...

$$0 = 3x^2 - 18x - 2$$

Then, one step here...

$$0 = ax^2 + bx + c$$

standard form quadratic



The result is
The _____ shortcut:

$$y = x^2 - 4x - 21$$

Solve by factoring.

Solve by completing the square.

Solve using the Quadratic Formula shortcut

$$y = 2x^2 - 7x - 30$$

Solve by factoring.

Solve by completing the square.

Solve using the Quadratic Formula shortcut

$$y = 2x^2 + 28x - 23$$

Solve by factoring.

Solve by completing the square.

Solve using the Quadratic Formula shortcut.