Solve by Taking Square Roots

*This is for when there is only a squared term (x^2) and no other variables.

*There is no gcf and it isn't a difference of squares.

Solve.

$$x^2 = 47$$

$$x^2 = -36$$

$$49n^2 = 100$$

$$9n^2 + 7 = 268$$

$$\frac{1}{2}\left(x+\frac{9}{2}\right)^2=2$$

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

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