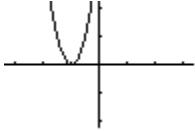


1. Solve by Graphing: $8x = -4 - 4x^2$

Solution:

Rewrite the equation. $4x^2 + 8x + 4 = 0$

Enter the left side into your calculator and Press Graph



The height is zero at $x = -1$

Answer: $x = -1$

2. Solve using Square Roots: $4(x - 1)^2 + 2 = 10$

Solution:

Take steps to get the Squared Item on one side by itself.

$$4(x - 1)^2 = 8$$

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

Now Take the Square Root of Both Sides

$$x - 1 = \sqrt{2}$$

$$\text{Answer: } x = 1 + \sqrt{2}$$

3. Solve by Factoring: $2x^2 - 16x = 12x - 48$

Solution:

Arrange the equation so that zero is on one side and all other terms on the other.

$$2x^2 - 28x + 48 = 0$$

Factor as much as possible.

$$2(x^2 - 14x + 24) = 0$$

$$2(x - 12)(x - 2) = 0$$

$$\text{Answer: } x = 12 \text{ \& } x = 2$$