

Complex Number $i^2 = -1$

$$\sqrt{-1} = i$$

$$\sqrt{-4} = 2i$$

$$\sqrt{-9} = 3i$$

Find $x = ?$

$$x^2 + 2x + 2 = 0$$

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

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

$$x+1 = i$$

$$x+1 = -i$$

$$x = -1-i$$

$$x = -1-i$$

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

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

$$x+1 = 2i$$

$$x+1 = -2i$$

$$x = -1+2i$$

$$x = -1-2i$$

$$2x^2 + 2x + 10 = x^2$$

$$x^2 + 2x + 10 = 0$$

$$(x+1)^2 = -9$$

$$x+1 = 3i$$

$$x+1 = -3i$$

$$x = -1+3i$$

$$x = -1-3i$$