

## Solving Quadratics Practice

Solve by using the Square Root Method:

1.  $4x^2 = -64$

$$x^2 = -16$$

$$x = \pm 4i$$

2.  $4n^2 - 7 = 317$

$$4n^2 = 324$$

$$n^2 = 81$$

$$n = \pm 9$$

3.  $-3x^2 = 768$

$$x^2 = -256$$

$$x = \pm 16i$$

4.  $8b^2 - 8 = -296$

$$8b^2 = -288$$

$$b^2 = -36$$

$$b = \pm 6i$$

5.  $-6(x-3)^2 - 9 = -153$

$$-6(x-3)^2 = -144$$

$$(x-3)^2 = 24$$

$$x-3 = \pm 2\sqrt{6}$$

$$x = 3 \pm 2\sqrt{6}$$

6.  $(y-6)^2 = -81$

$$y-6 = \pm 9i$$

$$y = 6 \pm 9i$$

7.  $2(x-9)^2 = 242$

$$(x-9)^2 = 121$$

$$x-9 = \pm 11$$

$$x = 9 \pm 11$$

$$x = 20$$
$$x = -2$$

8.  $-3(x+7)^2 = 27$

$$(x+7)^2 = -9$$

$$x+7 = \pm 3i$$

$$x = -7 \pm 3i$$