

## Honors Geometry

## Quadratics Review

Solve the equations below.

1.  $x^2 - 7x - 1 = 0$

5.  $9.2y^2 - 6.3y - 1.4 = 0$   
*Nearest hundredth*

2.  $a^2 - 9 = 16$

6.  $2x^2 - 5x = 0$

3.  $(b + 7)^2 = 36$

7.  $z^3 = z$

4.  $c^2 - 3c - 5 = 0$   
*Complete the square*

8.  $4h^2 + 1 = 4h$

$$1. x = \frac{7 \pm \sqrt{49+4}}{2} = \frac{7 \pm \sqrt{53}}{2}$$

2.

$$a^2 = 25$$

$$a = \pm 5$$

3.

$$(b+7) = \pm 6$$

$$b = -7 \pm 6$$

$$b = -1 \text{ or } -13$$

4.

$$c^2 - 3c + \frac{9}{4} = 5 + \frac{9}{4}$$

$$\left(c - \frac{3}{2}\right)^2 = \frac{29}{4}$$

$$c - \frac{3}{2} = \frac{\pm\sqrt{29}}{2}$$

$$c = \frac{3 \pm \sqrt{29}}{2}$$

5.

$$y = \frac{6.3 \pm \sqrt{6.3^2 - 4(9.2)(-1.4)}}{2(9.2)}$$

$$y = .86 \text{ or } -.18$$

6.

$$x(2x-5) = 0$$

$$x = 0 \text{ or } \frac{5}{2}$$

7.

$$z^3 - z = 0$$

$$(z)(z+1)(z-1) = 0$$

$$z = 0, 1, -1$$

8.

$$4h^2 - 4h + 1 = 0$$

$$(2h-1)(2h-1) = 0$$

$$h = \frac{1}{2}$$