

# Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

© 2013 Kuta Software LLC. All rights reserved.

**Use the information provided to write the vertex form equation of each parabola.**

1) Vertex at origin, Focus:  $\left(0, \frac{1}{4}\right)$

2) Vertex at origin, Focus:  $\left(0, \frac{1}{8}\right)$

3) Vertex at origin, Focus:  $\left(0, \frac{1}{2}\right)$

4) Vertex at origin, Focus:  $\left(0, \frac{1}{16}\right)$

5) Vertex at origin, Focus:  $\left(0, -\frac{1}{8}\right)$

6) Vertex at origin, Directrix:  $y = \frac{1}{4}$

7) Vertex at origin, Directrix:  $y = -\frac{1}{8}$

8) Vertex at origin, Directrix:  $y = -\frac{3}{4}$

9) Vertex at origin, Directrix:  $y = \frac{1}{44}$

10) Vertex at origin, Directrix:  $y = -\frac{1}{28}$

## Answers to Assignment (ID: 1)

1)  $y = x^2$

2)  $y = 2x^2$

3)  $y = \frac{1}{2}x^2$

4)  $y = 4x^2$

5)  $y = -2x^2$

6)  $y = -x^2$

7)  $y = 2x^2$

8)  $y = \frac{1}{3}x^2$

9)  $y = -11x^2$

10)  $y = 7x^2$