

Basic Functions**Parabola****Parabola Vertex**

1. *vertex* x^2

2. *vertex* $2x^2$

3. *vertex* $x^2 + 4$

4. *vertex* $x^2 + 1$

5. *vertex* $x^2 - 6x - 2$

6. *vertex* $x^2 + x + 1$

7. *vertex* $4x^2$

8. *vertex* $3x^2$

9. *vertex* $-x^2$

10. *vertex* $x^2 + 2$

Answers**Basic Functions****Parabola****Parabola Vertex**

1. Minimum $(0,0)$

2. Minimum $(0,0)$

3. Minimum $(0,4)$

4. Minimum $(0,1)$

5. Minimum $(3, -11)$

6. Minimum $\left(-\frac{1}{2}, \frac{3}{4}\right)$

7. Minimum $(0,0)$

8. Minimum $(0,0)$

9. Maximum $(0,0)$

10. Minimum $(0,2)$