

Algebra 1
Section 8.2/8.4 Worksheet #1

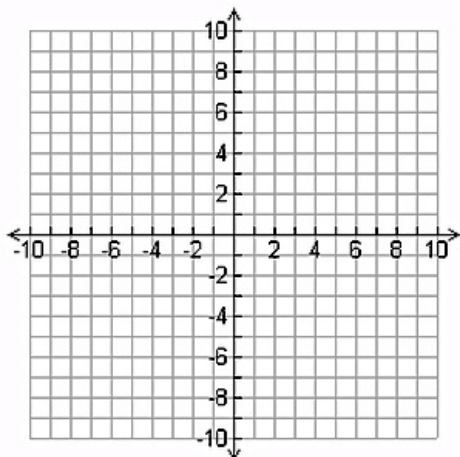
Name _____

Identify the vertex and the axis of symmetry of each quadratic function. Describe the transformation compared to the parent function $f(x) = x^2$.

1. $f(x) = (x-5)^2$ Vertex: AOS: Transformations:	2. $f(x) = x^2 - 3$ Vertex: AOS: Transformations:
3. $f(x) = \frac{4}{5}x^2 + 9$ Vertex: AOS: Transformations:	4. $f(x) = 4(x+2)^2$ Vertex: AOS: Transformations:
5. $f(x) = -4(x-1)^2$ Vertex: AOS: Transformations:	6. $f(x) = -x^2 + 7$ Vertex: AOS: Transformations:
7. $f(x) = \frac{1}{2}(x+6)^2 - 3$ Vertex: AOS: Transformations:	8. $f(x) = \frac{7}{3}(x-3)^2$ Vertex: AOS: Transformations:

Graph the function by making a table of values. State the domain and range.

8. $f(x) = (x - 3)^2$

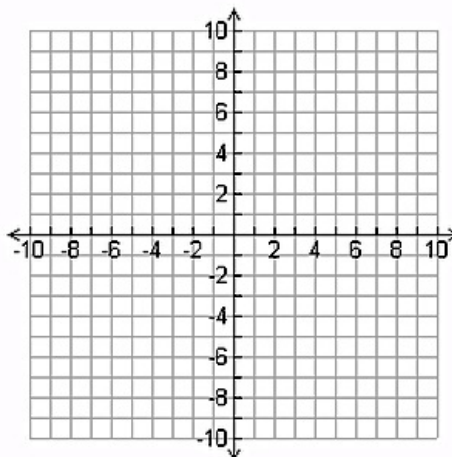


(Set Notation)

Domain:

Range:

9. $f(x) = x^2 - 2$

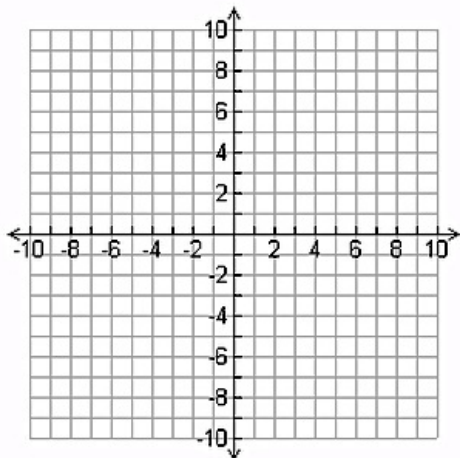


(Set Notation)

Domain:

Range:

10. $f(x) = -2x^2 + 4$

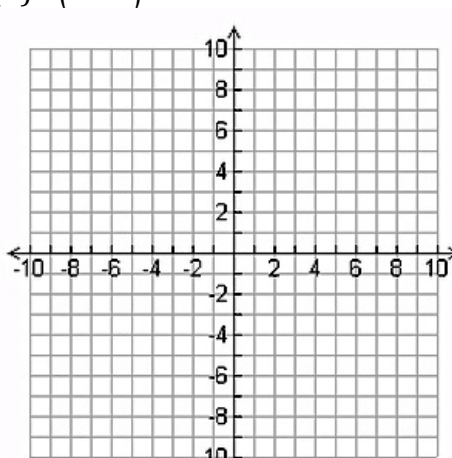


(Interval Notation)

Domain:

Range:

11. $f(x) = (x + 1)^2 - 4$



(Interval Notation)

Domain:

Range: