

Transformations of a Quadratic Function

The Language of Transformations:

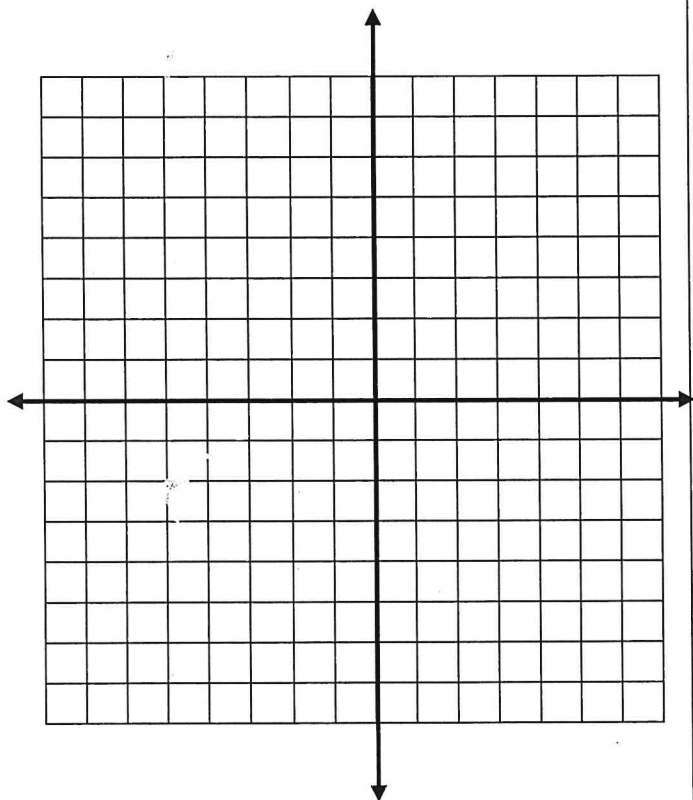
- HT = _____
- VT = _____
- R in x-axis = _____
- VSE = _____

- VSC = _____

Vertex Form of the Equation of a Quadratic Function

Examples:

1. $y = x^2$



Transformations:

Vertex:

End behaviour:

x-intercept(s):

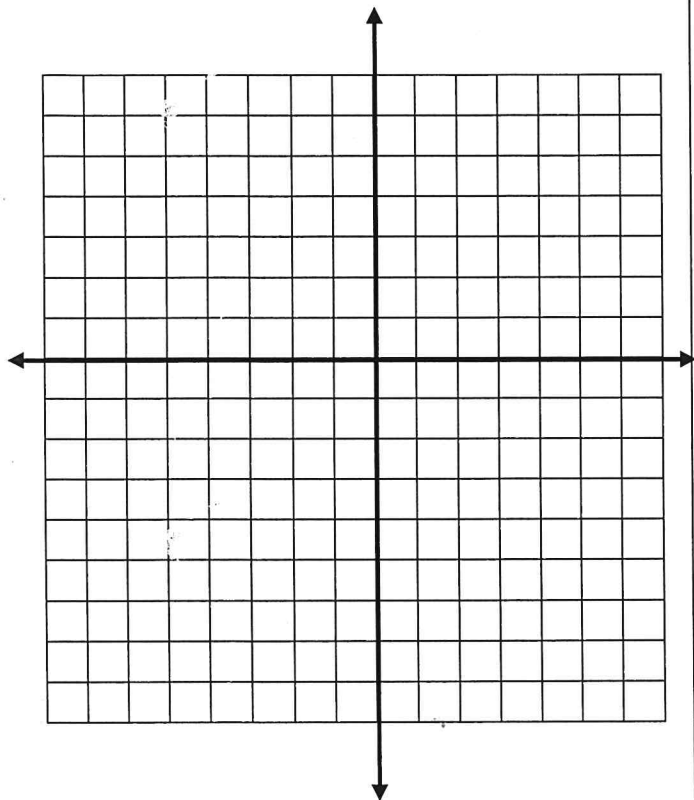
y-intercept:

Maximum or Minimum value:

Domain:

Range:

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



Transformations:

Vertex:

End behaviour:

x-intercept(s):

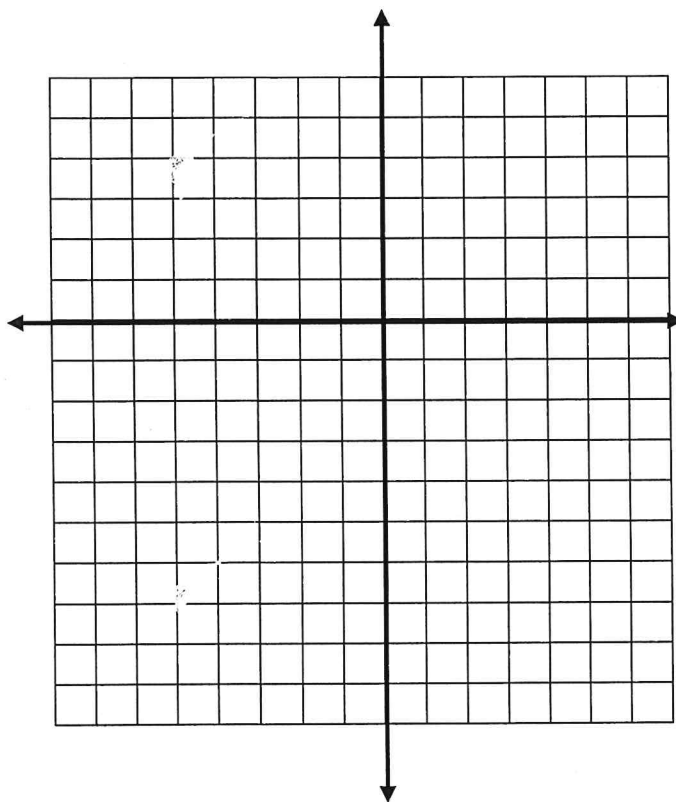
y-intercept:

Maximum or Minimum value:

Domain:

Range:

3. $y = -x^2$



Transformations:

Vertex:

End behaviour:

x-intercept(s):

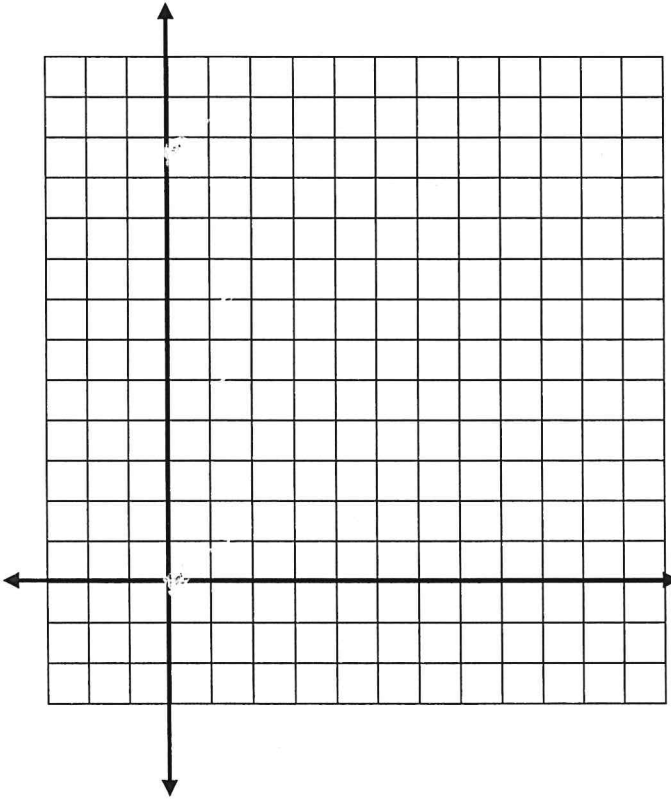
y-intercept:

Maximum or Minimum value:

Domain:

Range:

4. $y = (x - 5)^2$



Transformations:

Vertex:

End behaviour:

x-intercept(s):

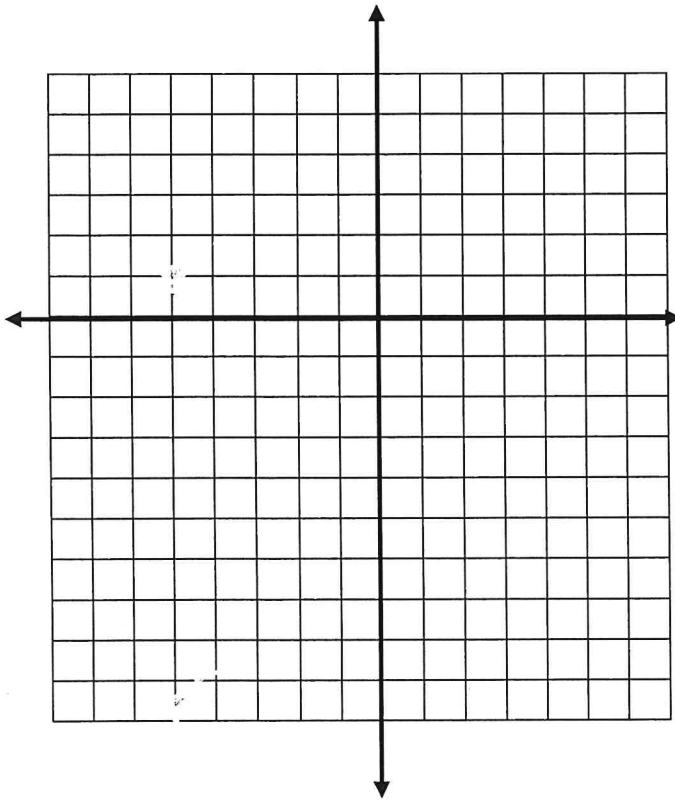
y-intercept:

Maximum or Minimum value:

Domain:

Range:

5. $y = (x + 3)^2$



Transformations:

Vertex:

End behaviour:

x-intercept(s):

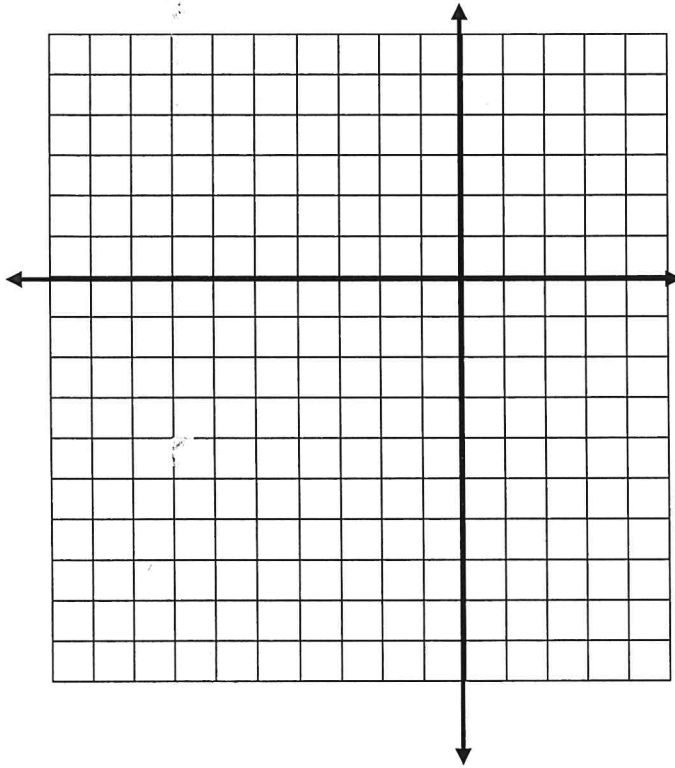
y-intercept:

Maximum or Minimum value:

Domain:

Range:

6. $f(x) = -(x + 7)^2$



Transformations:

Vertex:

End behaviour:

x-intercept(s):

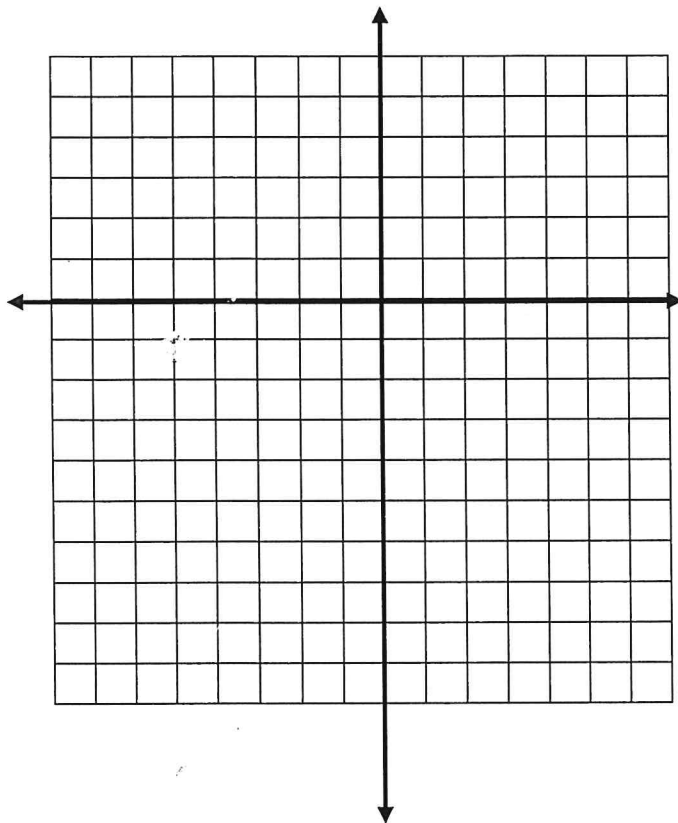
y-intercept:

Maximum or Minimum value:

Domain:

Range:

7. $f(x) = (x + 1)^2 - 3$



Transformations:

Vertex:

End behaviour:

x-intercept(s):

y-intercept:

Maximum or Minimum value:

Domain:

Range: