

## Determine the Transformations and Vertex:

1.  $y = 2(x+4)^2 + 6$

2.  $y = -(x-6)^2 + 9$

3.  $y = -5(x-8)^2 - 6$

4.  $f(x) = -2(x-4)^2 + 3$

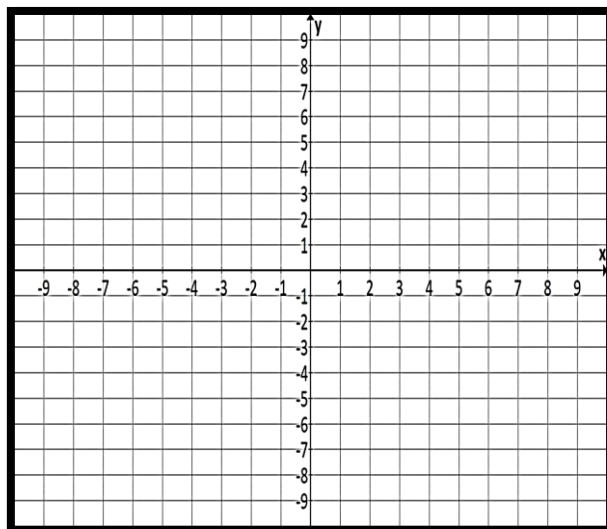
5.  $f(x) = -2(x+2)^2 - 3$

6.  $f(x) = (x+1)^2 + 2$

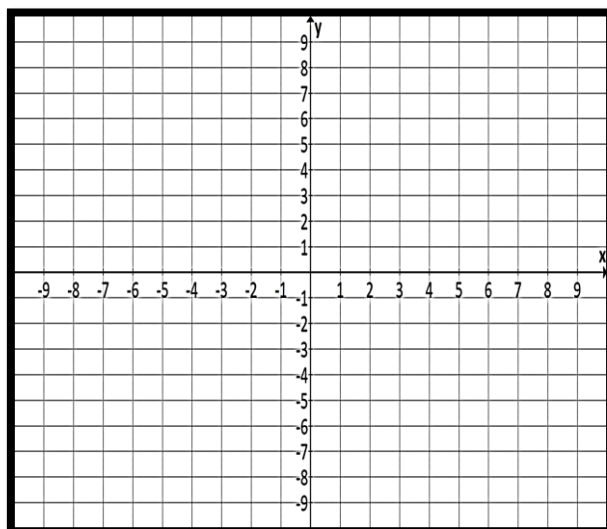
1. What is the quadratic equation of a function that reflects over the x-axis, goes up 2, and shifts to the left 5?
2. What is the quadratic equation of a function that moves to the right 7, goes down 3, and stretches by 4/3?

Graph the following in vertex form:

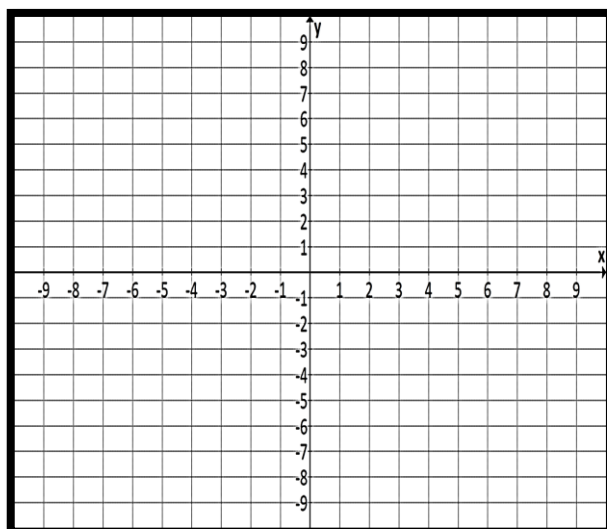
1.  $f(x) = 2(x - 3)^2 - 4$



2.  $y = -x^2 + 8$

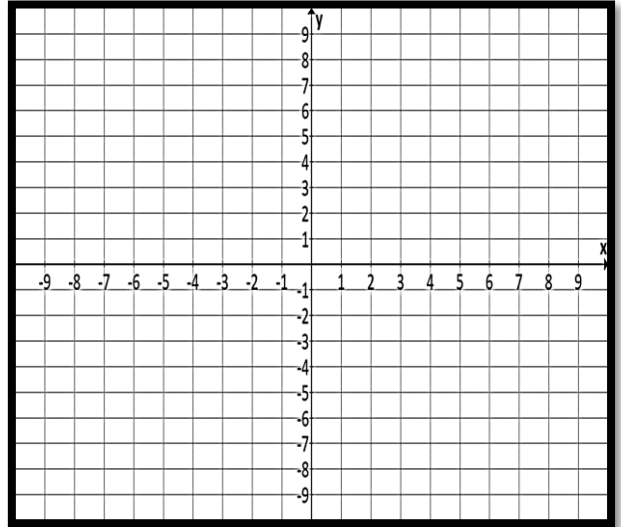


3.  $y = -(x - 6)^2 + 9$

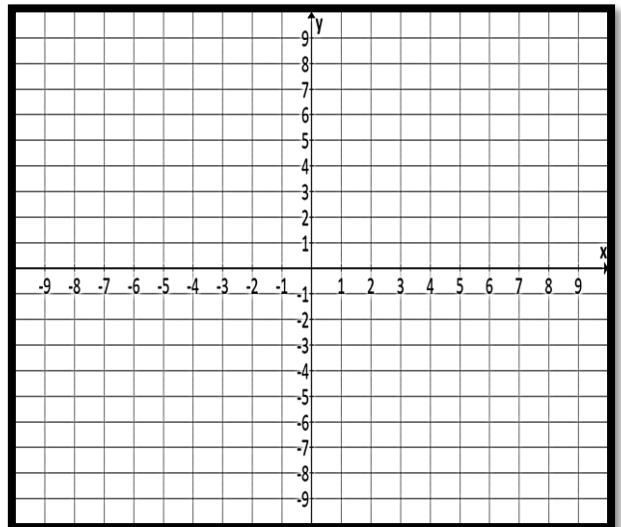


Graph the following in standard form:

1.  $y = x^2 + 4x + 6$



2.  $f(x) = -2x^2 - 16x - 28$



3.  $y = 2x^2 + 4x - 2$

