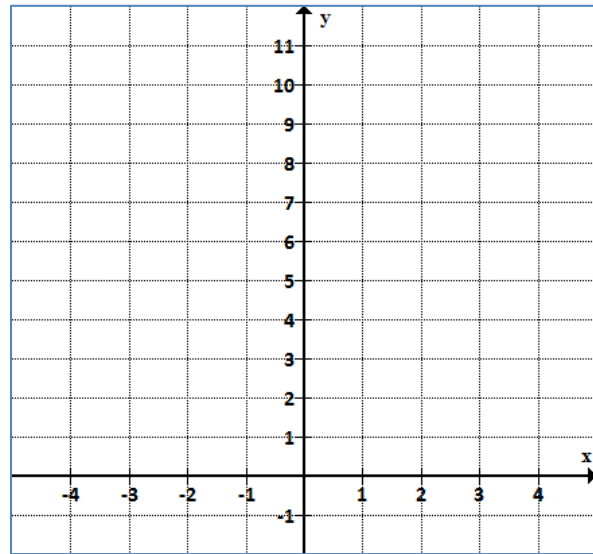


3.3 Quadratic Transformations

1. The parent function is $y = x^2$. All other quadratic equations are transformations of this graph.

x	y
-3	
-2	
-1	
0	
1	
2	
3	



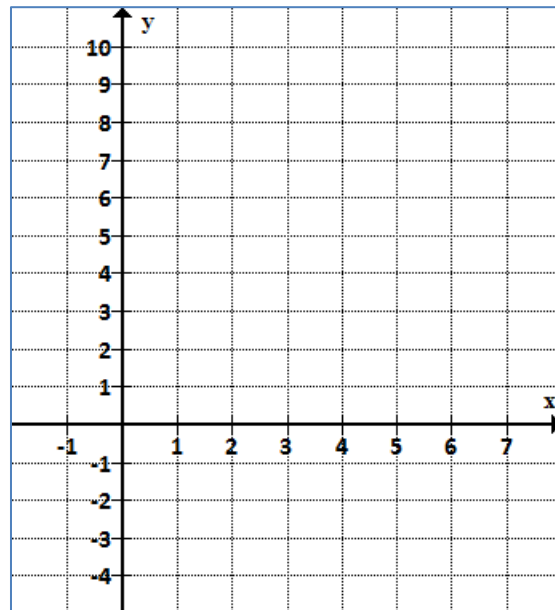
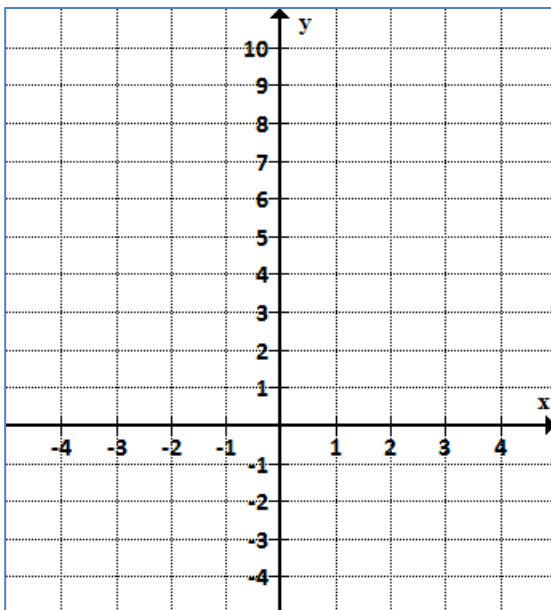
2. Transformations of quadratics – given $y = a(x - h)^2 + k$ describe the role of:

	Transformation (use proper mathematical terminology)
Value of k	
Value of h	

3. Describe the transformation, then graph,

a) $y = x^2 - 2$

b) $y = (x - 3)^2$



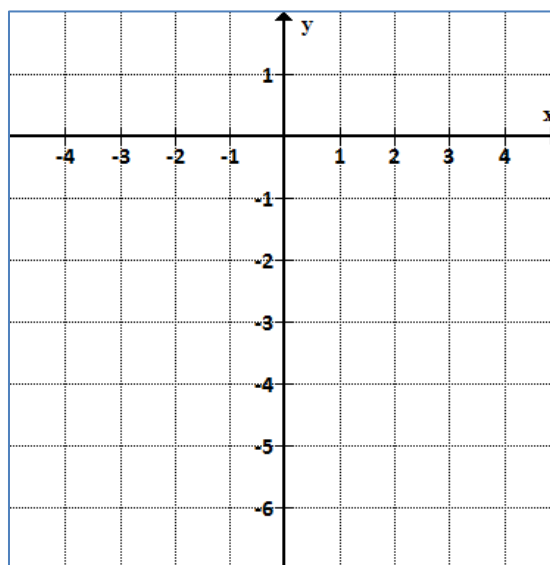
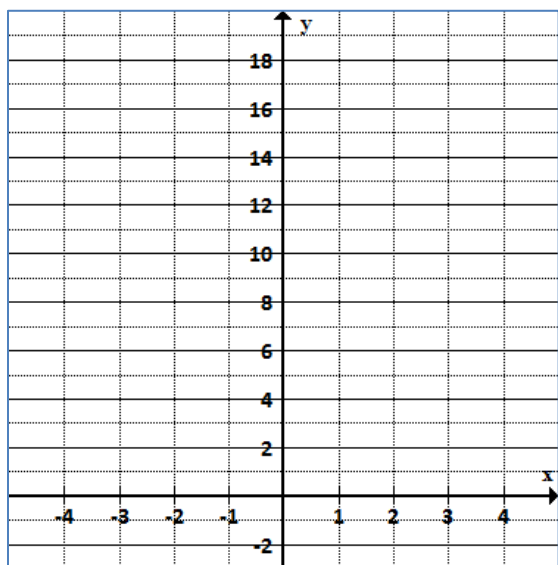
4. Transformations of quadratics – given $y = a(x - h)^2 + k$ describe the role of:

	Transformation (use proper mathematical terminology)
Sign of a	
Value of a	

5. Describe the transformation(s), then graph,

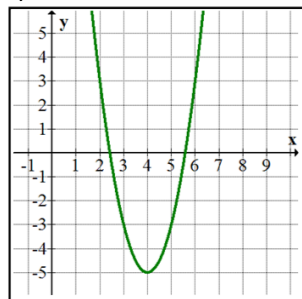
a) $y = 2x^2$

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

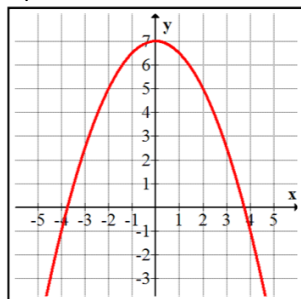


6. Determine the equation of each parabola.

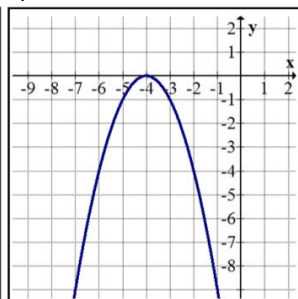
a)



b)



c)



d)

