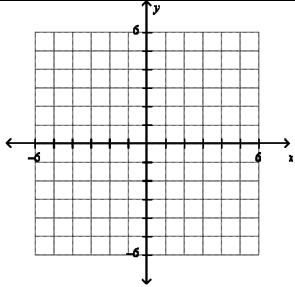
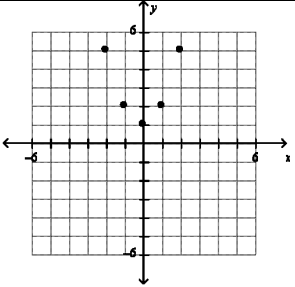
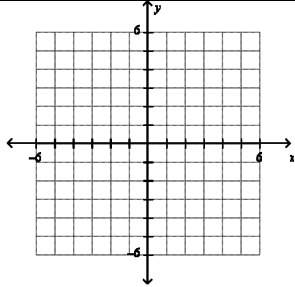
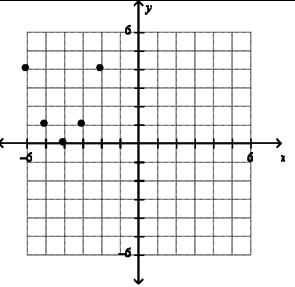
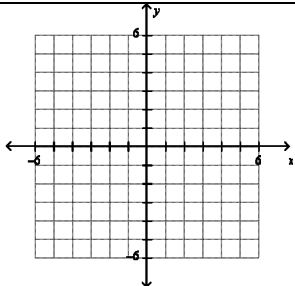
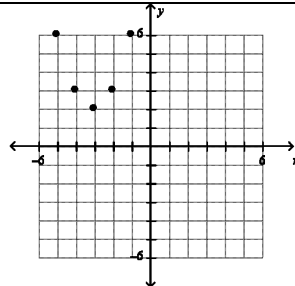
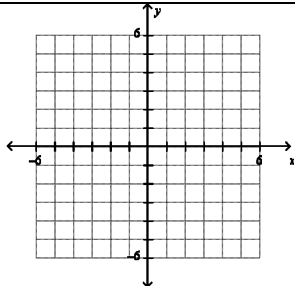
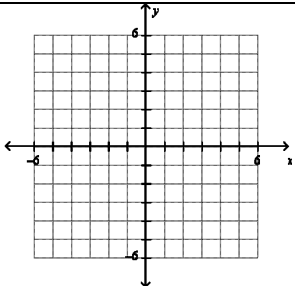


1. Complete the table. The parent function $f(x) = x^2$ has already been graphed and translated graphs are graphed with points. (You may use a graphing calculator!)

Graph				
Equation	$f(x) = x^2 - 4$		$f(x) = (x - 2)^2$	
Vertex				
Transformation		up 1		

Graph				
Equation	$f(x) = (x - 4)^2 - 2$			
Vertex				$(-2, -5)$
Transformation			right 3, up 1	

2. Write at least 4 statements describing the connections that you discovered between the graphs and the equations of the translated parabolas.

3. In general, what is the equation of the parabola that is translated horizontally h units and vertically k units?