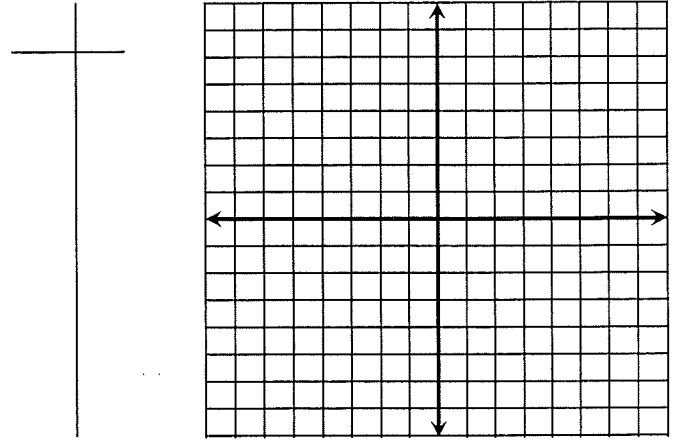
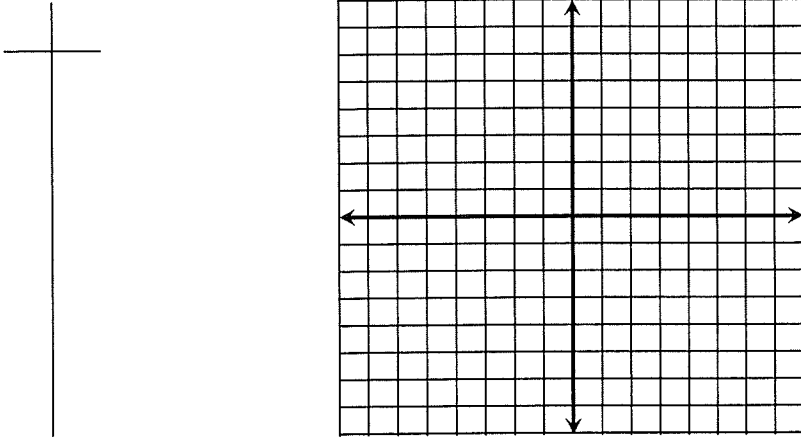


Describe the transformations and then sketch the graph. Use a different **COLOR** for each transformation

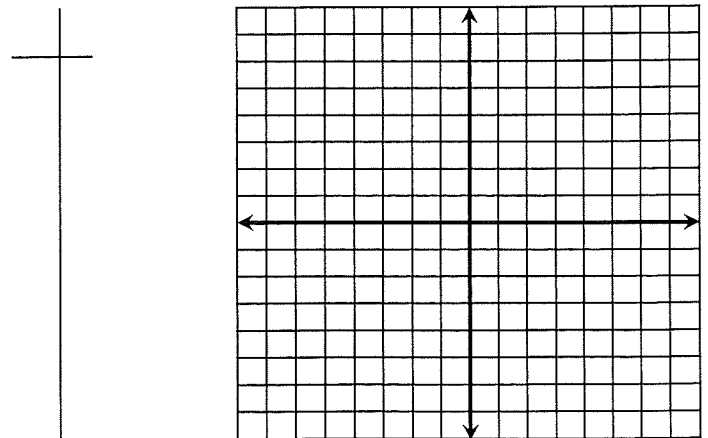
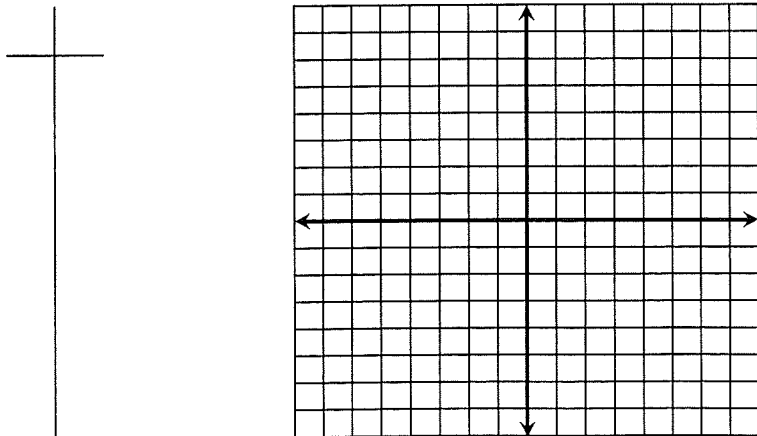
1. $g(x) = -2|x+1| - 3$

2. $g(x) = -(x-2)^2 + 3$



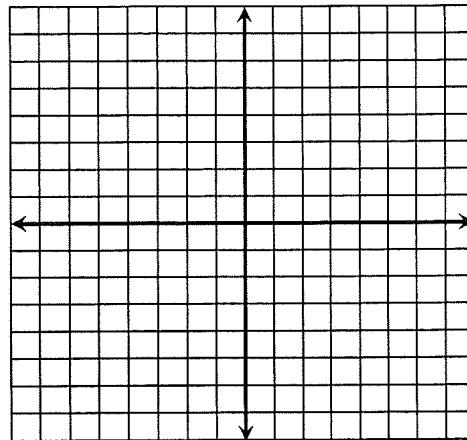
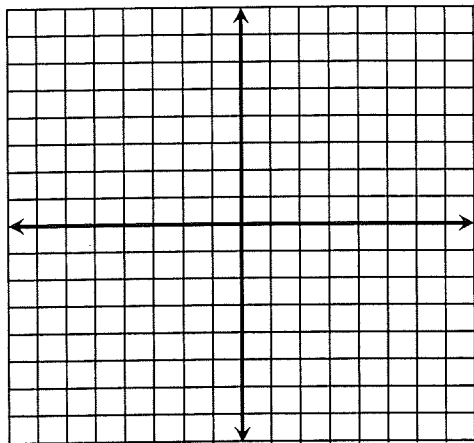
3. $g(x) = -\frac{1}{3}|x+3| - 2$

4. $g(x) = 3(x-2)^2$



5. $g(x) = \sqrt{x-1} + 3$

6. $g(x) = -(x+1)^2 - 3$



Write the function for each graph described below.

7. the graph of $f(x) = |x|$ vertical compress by a factor of $1/2$ and horizontal translation 3 unit to the left, reflect over the x axis, 2 up.

8. the graph of $f(x) = x^2$ reflection across the x -axis and horizontal stretch by a factor of 3, left 4

9. the graph of $f(x) = \sqrt{x}$ horizontal compression by a factor of $\frac{1}{4}$, reflection across the y -axis, and vertical translation 3 units up.

10. the graph of $f(x) = |x|$ vertical stretch by a factor of 3, vertical translation 2 units down, and horizontal translation 4 units left, reflect over the y axis.
