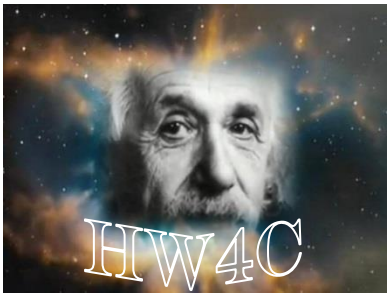
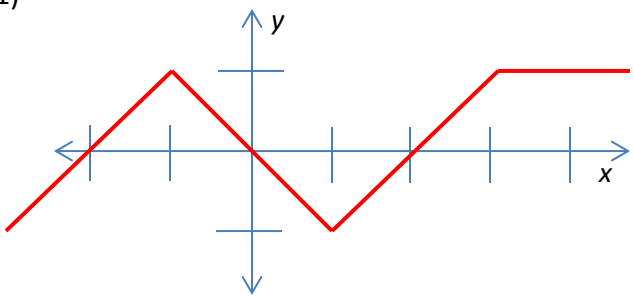


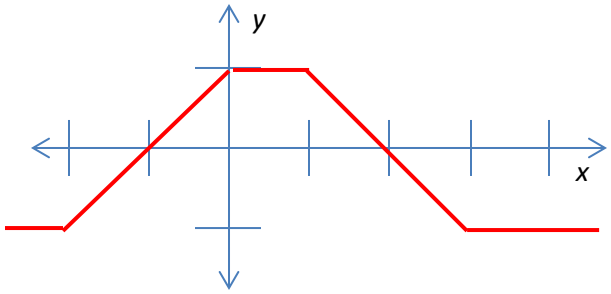
In exercises 1 – 3, the graph of $f(x)$ is given. Sketch the graphs of:

a) $y = -f(x)$ b) $y = |f(x)|$ c) $y = f(-x)$

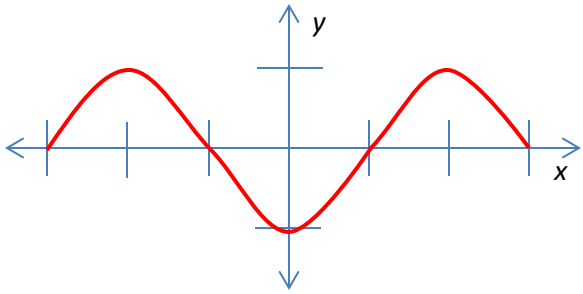
1)



2)



3)



A table of coordinates for a certain function f is given in the text box below. Name the new set of coordinates created for each reflection.

x	y
1	11
5	-3
-8	-1
-9	9
0	-2

4) $y = -f(x)$ 5) $y = |f(x)|$ 6) $y = f(-x)$

In exercises 7 – 14, sketch the graph of each equation and the reflection of the graph in the line $y = x$ (its inverse). Then find the equation for the reflected graph.

7) $y = 3x - 4$ 8) $y = \frac{1}{2}x + 1$ 9) $y = x^2 - 2x$ 10) $y = x^2 + 3$

11) $y = x^3$ 12) $y = \sqrt{x}$ 13) $y = |x| + 2$ 14) $y = -2|x| - 3$

1-3) See Mr. Paull for graphs

4) (1, -11), (5, 3), (-8, 1)
(-9, -9), (0, 2)

5) (1, 11), (5, 3), (-8, 1)
(-9, 9), (0, 2)

6) (-1, 11), (-5, -3), (8, -1),
(9, 9), (0, -2)

7-14) See Mr. Paull for graphs

7) $y^{-1} = (x + 4)/3$

8) $y^{-1} = 2x - 2$

9) $1 \pm \sqrt{x + 1}$, $x \geq -1$

10) $y^{-1} = \pm\sqrt{x - 3}$, $x \geq 3$

11) $y = \sqrt[3]{x}$

12) $y = x^2$, $x \geq 0$

13) $x = |y| + 2$

14) $x = -2|y| - 3$