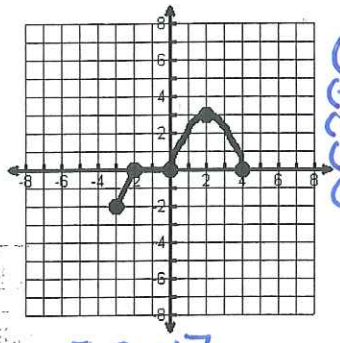
HOMEWORK Sept. 9 EXPLORING TRANSFORMATIONS

Adv. Precal

Sketch graphs of the following transformations of f(x). Give the domain and range.

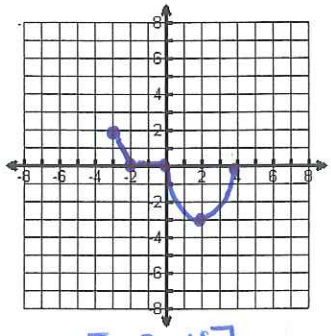
$y = f(x)$



(-3,-2)
(-2,0)
(0,0)
(2,3)
(4,0)

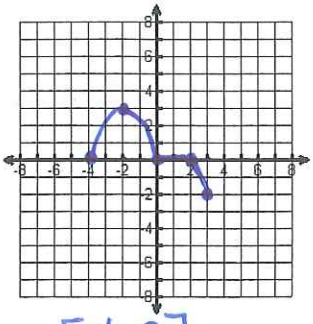
D: [-3,4]
R: [-2,3]

1) $y = -f(x)$



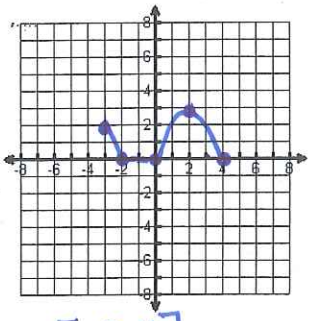
D: [-3,4]
R: [-3,2]

2) $y = f(-x)$



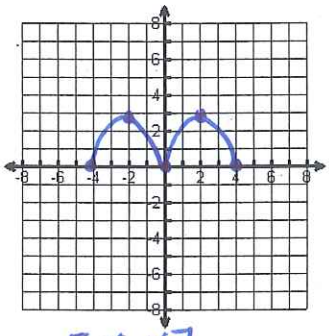
D: [-4,3]
R: [-2,3]

3) $y = |f(x)|$



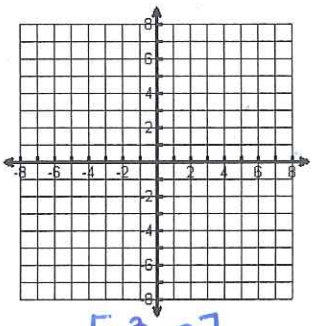
D: [-3,4]
R: [0,3]

4) $y = f(|x|)$



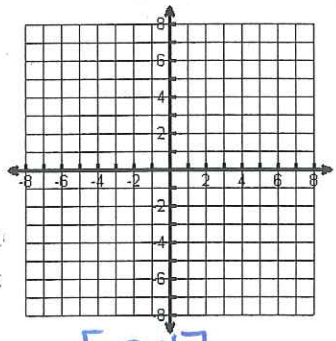
D: [-4,4]
R: [0,3]

5) $y = \frac{1}{2} f(2x)$



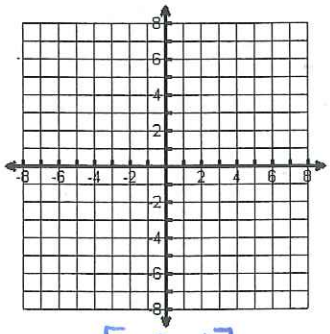
D: $[-\frac{3}{2},2]$
R: $[-1,\frac{3}{2}]$

6) $y = 2f(x)$



D: [-3,4]
R: [-4,6]

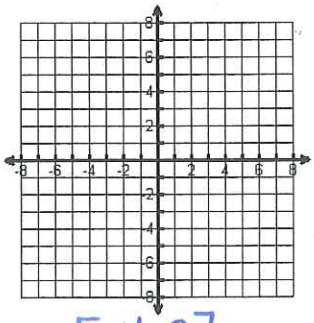
7) $y = \frac{1}{2} f(x)$



D: [-3,4]
R: $[-1,\frac{3}{2}]$

8) $y = f(x + 1) + 2$

left 1 up 2



D: [-4,3]
R: [-1,4]

Continued on page 4