Pre-Calculus Sec 3-4 p.176 #5   Name_____
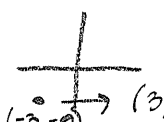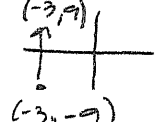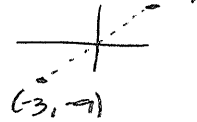
The point (-3, -9) satisfies the equation $y = x \cdot |x|$. Show this: $-9 = -3 \cdot |-3|$

$-9 = -3 \cdot 3 = -9$ ✓

Use this point to test whether the graph of $y = x \cdot |x|$ appears to be symmetric: $(3,9)$

$(-3,9)$

a) over the y-axis   b) over the x-axis   c) about the origin

$(-3,9) \to (3,9)$ $(-3,-9)$ $(3,9)$ $(-3,9)$

$(-3,-9) \to (3,-9)$ $(-3,-9) \to (-3,9)$ $(-3,9)$ $(-3,-9) \to (3,9)$

$-9 \overset{?}{=} 3 \cdot |3|$ $9 \overset{?}{=} -3 \cdot |-3|$ $9 \overset{?}{=} 3 \cdot |3|$

$-9 \neq 9$ $9 \overset{?}{=} -3 \cdot 3$ $9 = 9$ ✓

No $9 \neq -9$ YES

No

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The point (-3, -9) satisfies the equation $y = x \cdot |x|$. Show this:

Use this point to test whether the graph of $y = x \cdot |x|$ appears to be symmetric:

b) over the y-axis   b) over the x-axis   c) about the origin

(-3, -9) →   (-3, -9) →   (-3, -9) →