

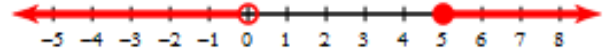
NAME: _____

DATE: _____

1 - 5 Multiple Choice. (3 points each)

1. What is the interval notation for the given graph?

- a. $(0, 5]$ b. $(-\infty, 0) \cup [5, \infty)$
- c. $[0, 5)$ d. $(-\infty, 0) \cup [5, \infty)$



2. If n represents an odd integer, the next larger odd integer is:

- a. n b. $n + 1$ c. $n + 2$ d. $2n$

3. For what value of x is it true that $x^3 < x < \frac{1}{x} < x^2$?

- a. $-\frac{1}{3}$ b. $\frac{1}{3}$ c. -1 d. -3

4. Which expression equals zero if $x = -4$ and $y = 4$?

- a. $x^2 - y^2$ b. $x^2 + y^2$ c. xy d. $x - y$

5 - 7 Replace each ? with one $<$, $>$, or $=$. (2 points each)

- 5. $-(-5)^2 ? (-5)^2$ 6. $1^{-4} ? 1^6$ 7. $3^4 ? 4^3$

8. Identify the property that justifies each step. (1 point each part)

$5x + 10 = 30$ _____

$5x + 10 - 10 = 30 - 10$ _____

$5x + 0 = 30 - 10$ _____

$5x = 30 - 10$ _____

$5x = 20$ _____

$\frac{5x}{5} = \frac{20}{5}$ _____

$x = 4$ _____

