

MATH 114 - Reading Assignment 9 - Section 2.5 - Spring 2008

emaN

1. $f(x) = mx + b$

Domain _____

Increasing when _____

Decreasing when _____

Constant when _____

Even, Odd, or Neither? _____

2. $f(x) = |x|$

Domain _____

Increasing _____

Decreasing _____

Even, Odd, or Neither? _____

3. $f(x) = x^2$

Domain _____

Increasing _____

Decreasing _____

Even, Odd, or Neither? _____

4. $f(x) = x^3$

Domain _____

Increasing _____

Decreasing _____

Even, Odd, or Neither? _____

5. $f(x) = \sqrt{x}$

Domain _____

Increasing _____

Decreasing _____

Even, Odd, or Neither? _____

(PLEASE TURN OVER!)

6. $f(x) = \sqrt[3]{x}$

Domain _____

Increasing _____

Decreasing _____

Even, Odd, or Neither? _____

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

Domain _____

Increasing _____

Decreasing _____

Even, Odd, or Neither? _____

8. **True** or **False**: The greatest integer function is an even function, just like a constant function.
9. The greatest integer function is an example of a function that has a _____, or an x -value at which the graph suddenly “steps” from one value to another without taking on any of the intermediate values.
10. Functions that are defined by more than one equation are called _____ - _____
_____.