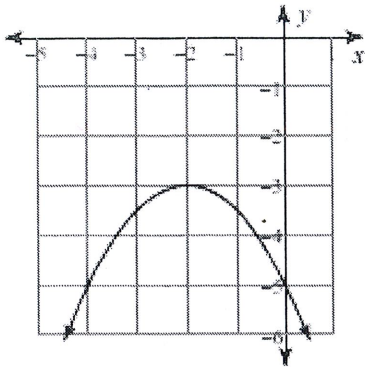


Name key Date: _____ Period: _____

Number Systems and Characteristics of Functions

Find the domain and range and intervals of increasing and decreasing.

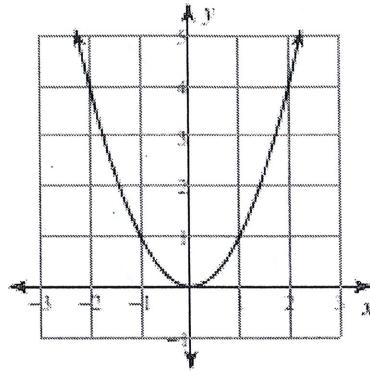


D = \mathbb{R}

R = $(-\infty, -3]$

Inc = $(-\infty, -2)$

Dec = $(-2, \infty)$

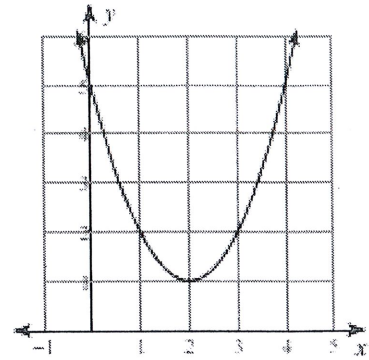


D = \mathbb{R}

R = $[0, \infty)$

Inc = $(0, \infty)$

Dec = $(-\infty, 0)$

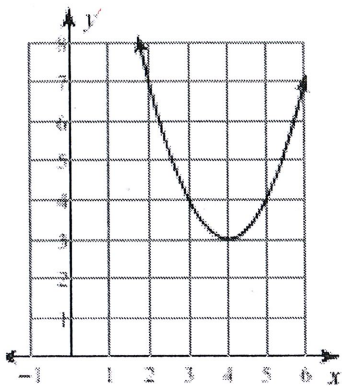


D = \mathbb{R}

R = $[1, \infty)$

Inc = $(2, \infty)$

Dec = $(-\infty, 2)$

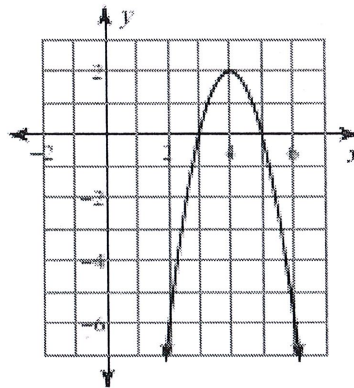


D = \mathbb{R}

R = $[3, \infty)$

Inc = $(4, \infty)$

Dec = $(-\infty, 4)$

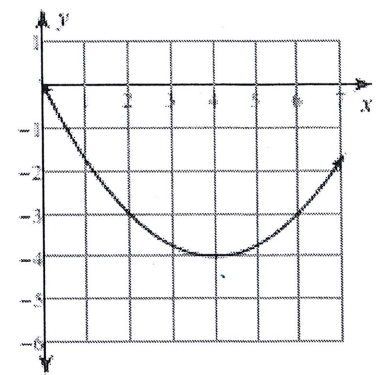


D = \mathbb{R}

R = $(-\infty, 2]$

Inc = $(-\infty, 4)$

Dec = $(4, \infty)$



D = \mathbb{R}

R = $[-4, \infty)$

Inc = $(4, \infty)$

Dec = $(-\infty, 4)$

Into which group does each number go?

	Natural	Whole	Integers	Rational	Irrational	Real	Imaginary	Complex
22.5				✓		✓		
$3/8$				✓		✓		
$\sqrt[3]{14}$					✓	✓		
$4-7i$								✓
138	✓	✓	✓	✓		✓		
-18			✓	✓		✓		
$\sqrt{-18}$					✓	✓		
$2i-18.4$								✓
0		✓	✓	✓		✓		
$9/4$				✓		✓		