
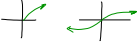

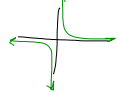


January 7, 2015
 College Algebra \rightarrow Functions

Functions

- ① Linear \rightarrow Lines 
- ② Radical \rightarrow Curves 
- ③ Quadratic \rightarrow Curves 
- ④ Rational \rightarrow Curves 
- ⑤ **Tractions!!**

Jan 7-10:51 AM

Sets

def.: a set is a collection of "like" things.

\downarrow
members

Jan 7-11:19 AM

Mathematical Sets

- ① Natural Numbers
 \downarrow
 Counting $N = \{1, 2, 3, \dots\}$

$n = m \cdot k$

$n = 12$
 $m = 4$
 $k = 3$ $\left\{ \begin{array}{l} 12 = 4 \cdot 3 \\ \frac{12}{4} = 3 \\ 3 = 3 \text{ true} \end{array} \right.$

$n = 7$
 $m = 7$
 $k = 1$ $\left\{ \begin{array}{l} 7 = 7 \cdot 1 \\ \frac{7}{7} = 1 \text{ or } \frac{7}{1} = 7 \end{array} \right.$

def.: a Prime number is a natural number that has itself and one as factors.

def.: a Composite number which is all natural numbers that are not prime.

Jan 7-11:22 AM

Natural Numbers

- ① Prime $\rightarrow P = \{2, 3, 5, 7, 11, 13, \dots\}$
- or
- ② Composite

What is one?

\forall One is considered neither prime or Composite

$1 = 1 \cdot 1$ true!

Jan 7-11:34 AM

Zero!

163 or 1603

- ② Whole Number
 $W = \{0, 1, 2, \dots\}$

$w = m \cdot k$

$9 = 0 \cdot 3$?

$\frac{9}{0} = 3$?

\downarrow meaning
 Undefined!

Jan 7-11:39 AM

Do Readings for Tuesday

faculty.cing.edu/mgoodroe

Jan 7-11:48 AM