R1.1

Real Numbers

Rational

Can be written as a fraction
Decimal will stop or repeat

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{5}{8}$ $\frac{6}{1}$

Irrational

Can not be written as a fraction
Decimal will not stop will not repeat

π $\sqrt{2}$ $\sqrt{3}$ $\sqrt{5}$ .515515551555551...

Rational

Integers

...-4,-3,-2,-1,0,1,2,3,4,...

Whole Numbers

0,1,2,3,4,...

Counting Numbers, Natural Numbers

1,2,3,4,5,...

8 N, W, I, Rat, Real

$\frac{1}{5}$ Rat, Real

Imaginary Numbers

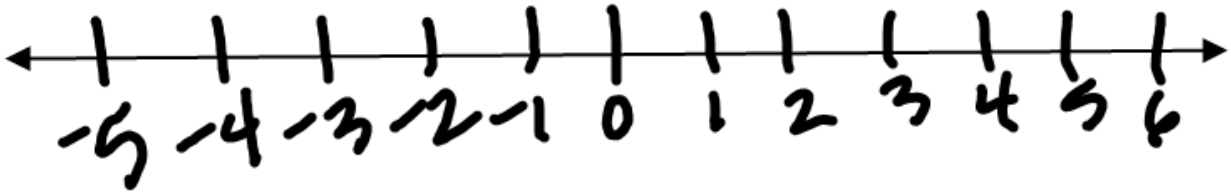
$i = \sqrt{-1}$

$\sqrt{-9}$

$\sqrt{9 \cdot -1}$

$\sqrt{9} \cdot \sqrt{-1}$

$3i$



$4 > -2$

$-5 < -1$

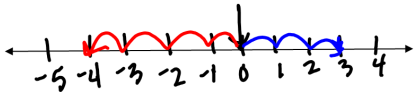
$-2 \neq 2$

$-3 < 6$

$2 \leq 5$

$5 \leq 5$

Absolute Value



$|-4| = 4$ $\quad |0| = 0$

$|3| = 3$

Distance

85 $\quad$ 99

$|99-85|$ $\quad$ $|85-99|$

$|14|$ $\quad$ $|-14|$

14 $\quad$ 14

The distance between a number, x and 5 is 8

$|x-5| = 8$

The distance between x and -4 is greater than 2

$|x-4| > 2$

$|x+4| > 2$

$-|5|$

-5

$x \geq 14$ At least 14

Do not do 73, 77