

2.1 Real Numbers

Oct. 10, 2006

- Real Numbers:

$\mathbb{R}$

1, 4, 0, -7, 1, $\frac{1}{2}$,

*** Real Numbers are
either Positive or
Negative!**

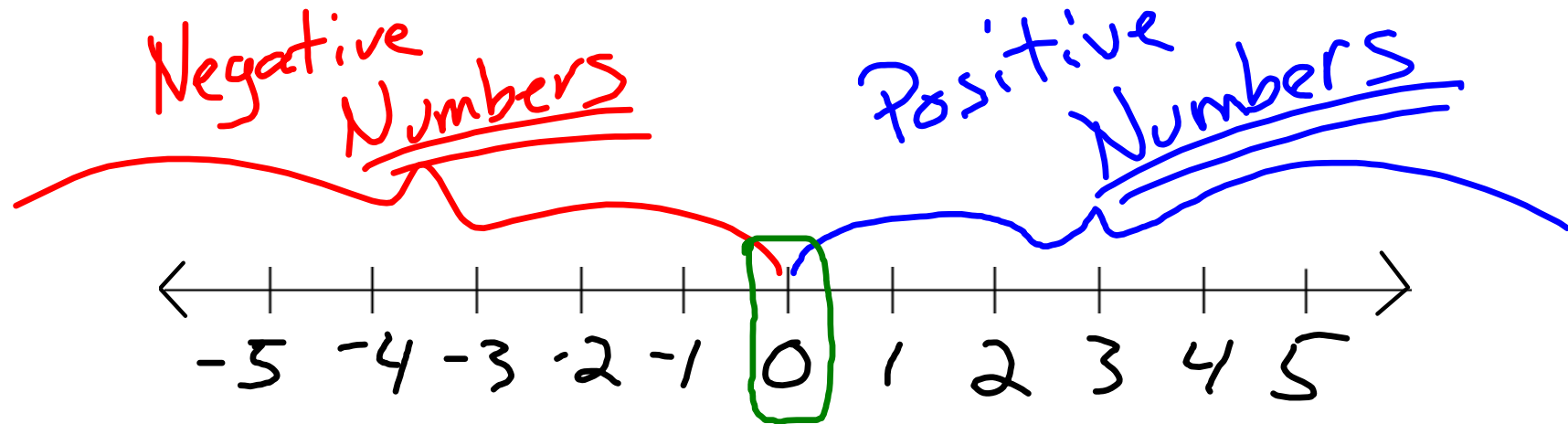
$\mathbb{R} : (-\infty, \infty)$

Special Real Numbers

-Whole Numbers: $\{0, 1, 2, 3, \dots\}$ 
 $\mathbb{W} : [0, \infty)$

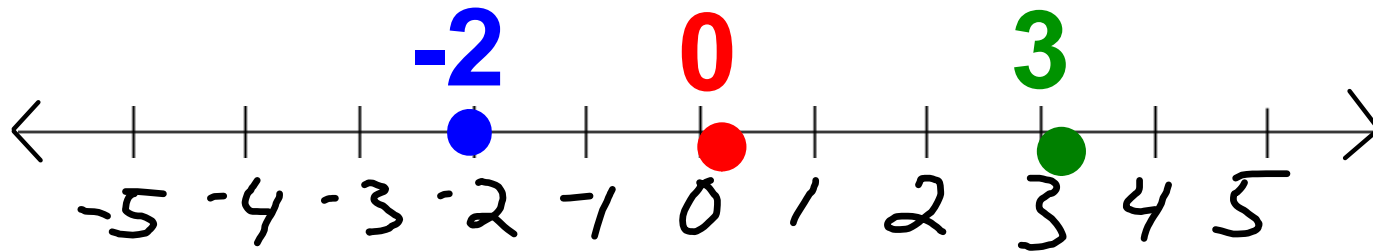
-Integers: $\{\dots, -2, -1, 0, 1, 2, \dots\}$ 
 $\mathbb{Z} : (-\infty, \infty)$

Real Number Line



Zero: Neither Positive Nor Negative
It is Neutral

Graph: -2, 0, 3



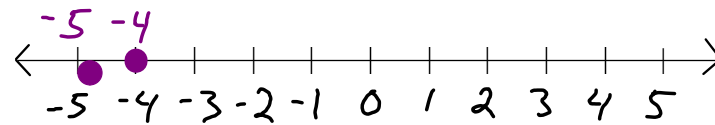
Compare Integers:

*Which is greater than
and which is less than

Compare -4 & -5

Then write 2 inequalities

∴
means
Therefore



-4 is to the Right of -5

∴ -4 is greater than -5

$$\underline{\underline{-4 > -5}}$$

-5 is to the Left of -4

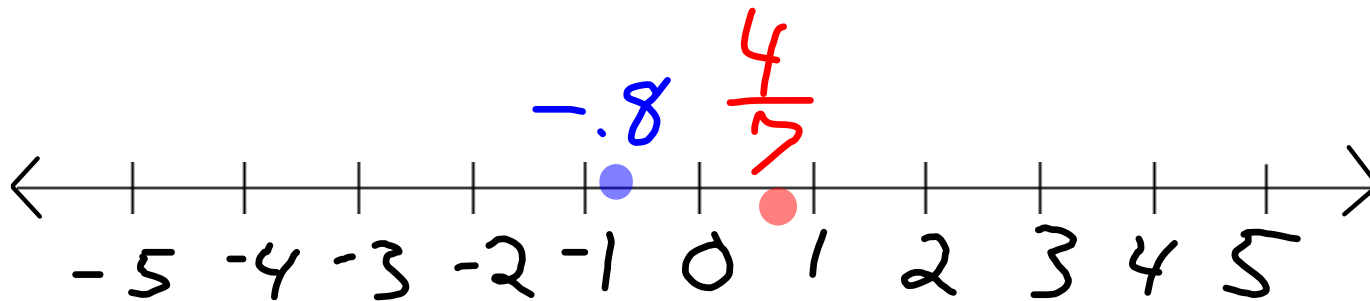
∴ -5 is less than -4

$$\underline{\underline{-5 < -4}}$$

Graph Real Numbers:

Graph: $-.8$ & $\frac{4}{7}$

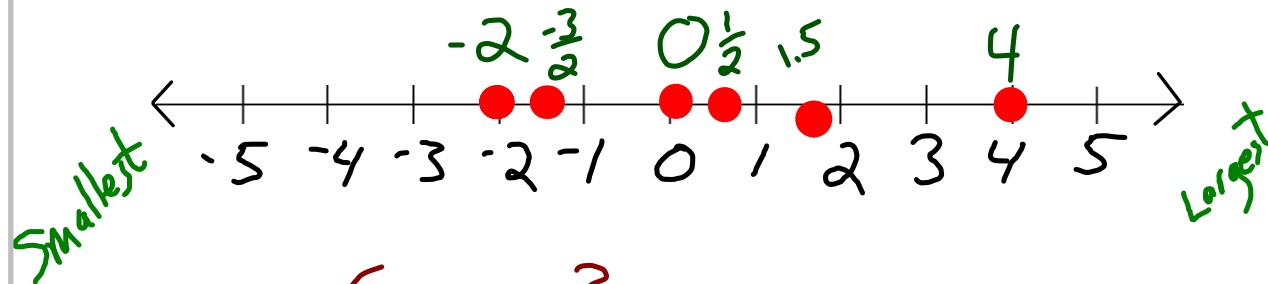
$0.57142857142857142857142857142857$



Order Real Numbers:

Write the numbers
 $-2, 4, 0, 1.5, \frac{1}{2}, -\frac{3}{2}$
in increasing order

from Smallest
to largest



$\{-2, -\frac{3}{2}, 0, \frac{1}{2}, 1.5, 4\}$

O. T. L.

1. Pg. 68-69: 1, 2, 15-29 (o),
31-34 (a), 35-49 (o), 55-59 (a)

Use ex 5 on pg 67
for help if needed
#s 45, 47, 49, Show me
the number line for
each