

2.1 Real Numbers

Sept. 25, 2006

- Real Numbers: $2, -2, 0, \frac{3}{4}$

*** Real Numbers are** $-2\frac{7}{8}$
either Positive or
Negative!

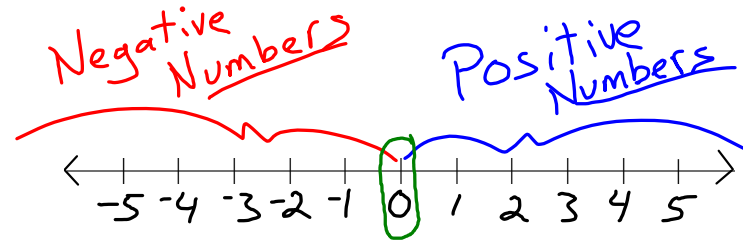
Special Real Numbers

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

-Whole Numbers:

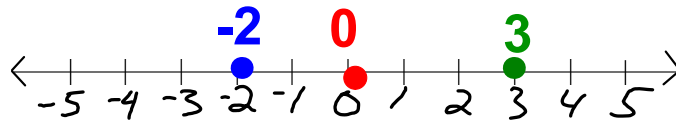
$\{0, 1, 2, 3, \dots\}$
 $[0, \infty)$

Real Number Line



Zero: Neither Positive Nor Negative.
It is Neutral

Graph: -2, 0, 3

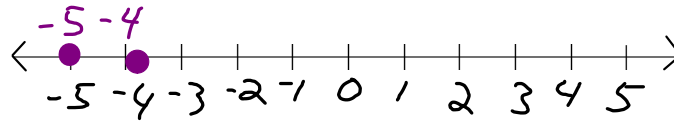


Compare Integers:

*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

$$-4 > -5$$

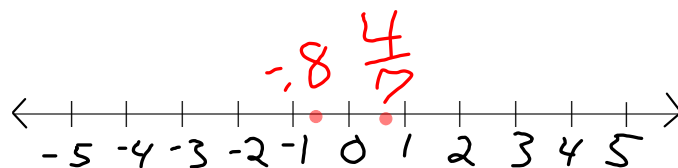
-5 is to the Left of -4

∴ -5 is Less than -4

$$-5 < -4$$

Graph Real Numbers:

Graph: $-.8$ & $\frac{4}{7}$ 0.57142857142857142857142857142857

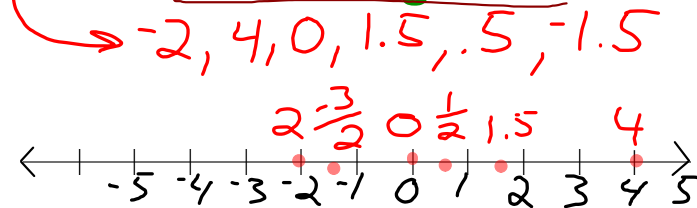


Order Real Numbers:

re-write
as a
dec.

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

Smallest
to
Largest

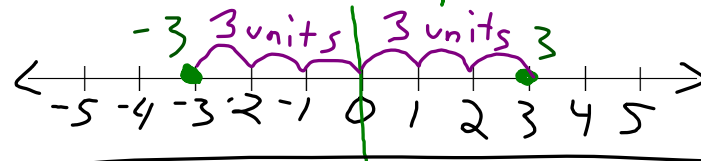


$-2, -\frac{3}{2}, 0, \frac{1}{2}, 1.5, 4$

2.2. Absolute Value

opposites: Two numbers that are the same distance from zero on the # line.

ie: -3 & 3 are opposites



What is the opposite of:

-4 : 4

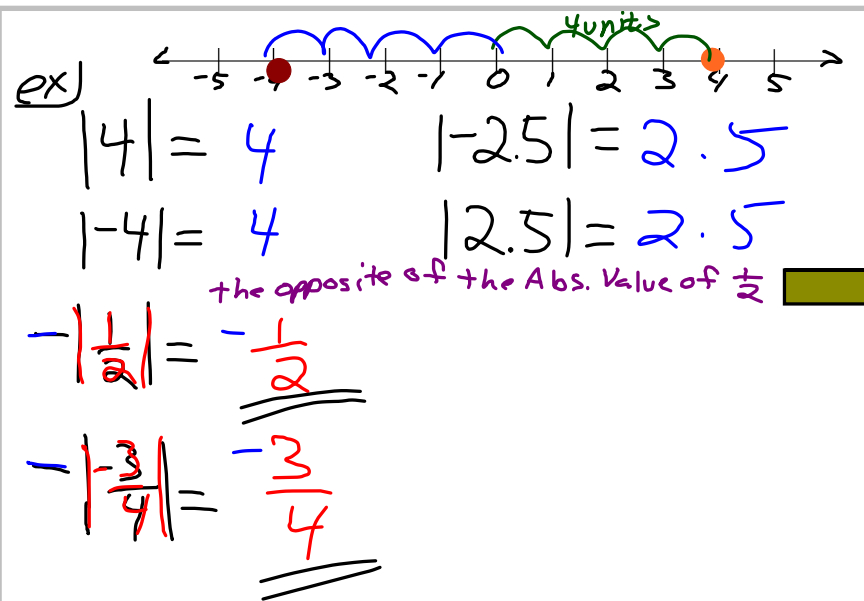
-1.5 : 1.5

$.82$: $-.82$

-absolute value: a number's distance from zero on the # line

we use the $||$ symbol to represent Abs. Value.

ie: $|-5| \Rightarrow$ Absolute Value of -5



Use Mental Math to Solve:

$$|x| = 7$$

What Numbers ^{have} ~~has~~ a
distance from zero
that ~~is~~ ^{are} 7?

$$\underline{\underline{x = 7}} \text{ or } \underline{\underline{x = -7}}$$

they both have a distance
of "7" away from zero.

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

② Pg 74: 1-15(a)
17-39(o)

③ Turn in the C.R.Q.

xx
Tes. Corf. ~~On Bart table!~~
6th Shelf