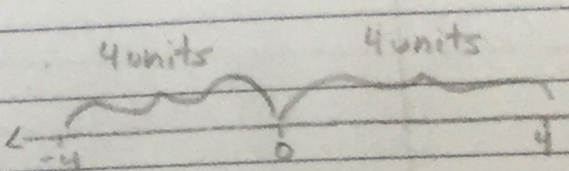
~~Venn diagram~~ for the real numbers (#s)

rational #s
natural: 1, 2, 3, 4, ...
whole: 0, 1, 2, 3, 4 ...
integers: ... -3, -2, -1, 0, 1, 2, 3 ...
Fractions: $\frac{1}{2}, \frac{3}{2}, \frac{5}{3}, \frac{2}{1}$
decimals: 0.5, 0.6,
$\frac{a}{b}$ $b \neq 0$
can't be expressed as $\frac{p}{q}$

irrational #s
$\pi \approx 3.1415$
$\sqrt{3} = 1.7321$
non-repeating #s are non-terminating decimals

classify each # using the root # system

1 -10 rational, integer
2 5 rational, integer, whole, natural
3 $\sqrt{7}$ irrational
4 $\frac{2}{9}$ rational, fraction,
5 1.41421... irrational
6 145 rational, decimal
7 $3.\overline{23}$ rational, dec
a 7.42 ra decimal
b $\sqrt{49}$ rational
c 0.47646464... rational
d $-\sqrt{32}$ irrational



Absolute value: $|x|$ $|-14| = 4$, $|1-4| = 4$
$|0| = 0$, $-|-2| = -2$, $-|400| = -400$

Perform the indicated equations

1 $(-5)+(-3) = -8$
$(5)+(3) = 8$
$(-5)+(3) = -2$
$(5)+(-3) = 2$

2 $(-5)-(-3) = -2$
$(5)-(3) = 2$
$(-5)-(3) = -8$
$(5)-(-3) = 8$