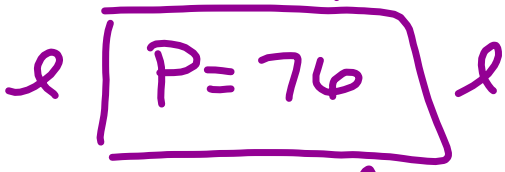
11. You are taking a course that has five tests. To get a B in the course, you must have an average of at least 80% on the five tests. Your scores on the first four tests were 67, 94, 71, and 89. What must you score on the fifth test to get a B for the course?

$$\frac{67+94+71+89+x}{5}=80$$

$$\frac{321+x}{5}=80\cdot 5 \qquad 321+x=400 \qquad -321 \quad -321 \qquad x=79$$

9. The width of a rectangle is 6 inches less than the length and the perimeter of the rectangle is 76 inches. Find the width of the rectangle.

$w=l-6$



$w=l-6=22-6=16$

$4l-12=16$

$+12 \quad +12$

$\frac{4l}{4}=\frac{88}{4}$

$l=22$

$$\frac{110 \times 703}{(68)^2}$$

$$\frac{77,330}{4624} = 16.7$$

$I = Prt$

$P = 2000$ $I = 2000(.04)(6)$

$r = .4\% = .04$ $\$480$

$t = 6$

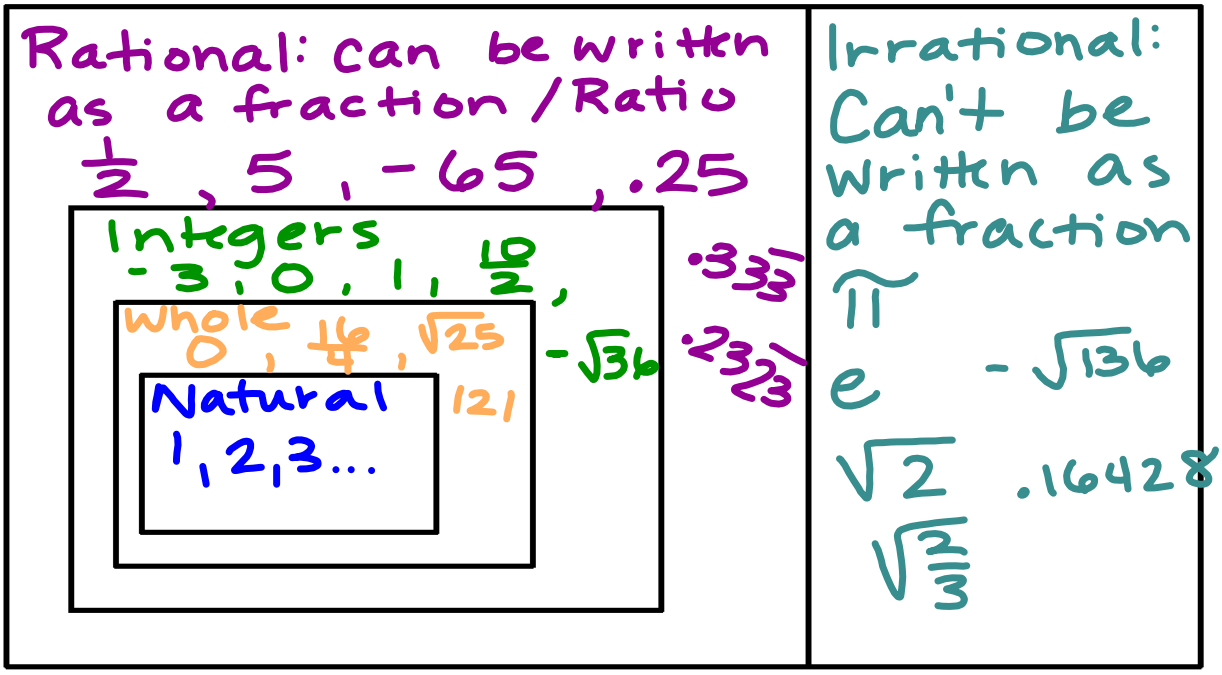
$A = C - 2DE$

$-C \quad -C$

$$\frac{A - C}{-2D} = \frac{-2DE}{-2D}$$

$$\frac{A - C}{-2D} = E$$

THE REAL NUMBER SYSTEM



Natural: > 0

Whole: Start + 0

Integers: Opposite or inverse

Rational: $\frac{a}{b}$ or fraction form

Real: All Rational & Irrational

Type	Example
* Proper Fractions	$\frac{1}{2}$, $\frac{1}{4}$
* Improper	$\frac{12}{5}$, $\frac{9}{2}$
* Mixed	$5\frac{1}{2}$
* Integers	$-3, 1, 0$
* Repeating	$.1212\overline{12}$
* Terminating (Stop)	.25, .5, .684

terminating
repeating

1. Ratio
2. non-perfect
3. Irrational

ex. $\sqrt{5}, \pi, e, 12.5631724\ldots$

$\left\|\frac{20}{9}\right.$	$\sqrt{169}$
$\sqrt{6}$	14
$175.28046....$	$\frac{-16}{-2}$
$\frac{1}{2}$	$\sqrt{0}$
$\frac{467}{13}$	$4.\overline{67}$

$-\sqrt{225}$	$3.\overline{3}$
-37	65.04
π	$\frac{1}{9}$
10.2	$4.58...$
0.86	$\sqrt{5}$