

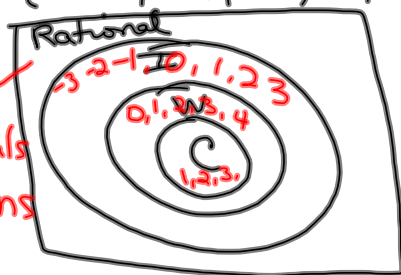
Set
subset \subset is a subset
 prefix sub - below or under

9.) $\{1, 2, 3, 4, \dots\}$ Counting numbers

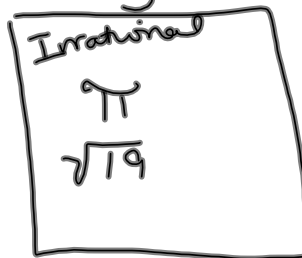
$\{0, 1, 2, 3, 4\}$ whole numbers

$\{-3, -2, -1, 0, 1, 2, 3, \dots\}$ Integers

Real Numbers
Rationals
 have decimals
 have fractions



vs



18.) $\frac{2}{3}$ Rational

Ex: $\sqrt{36} = 6$

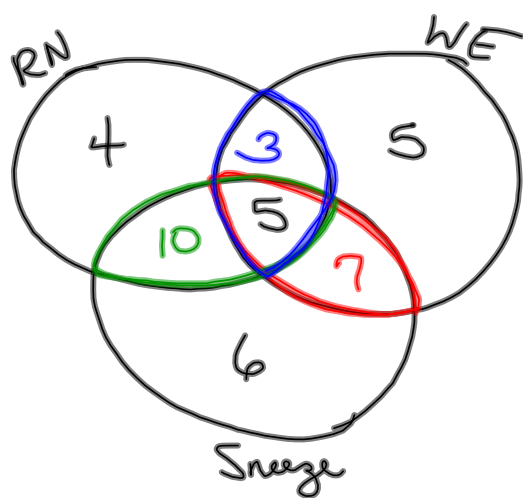
Counting
 whole
 Integer
 Rational

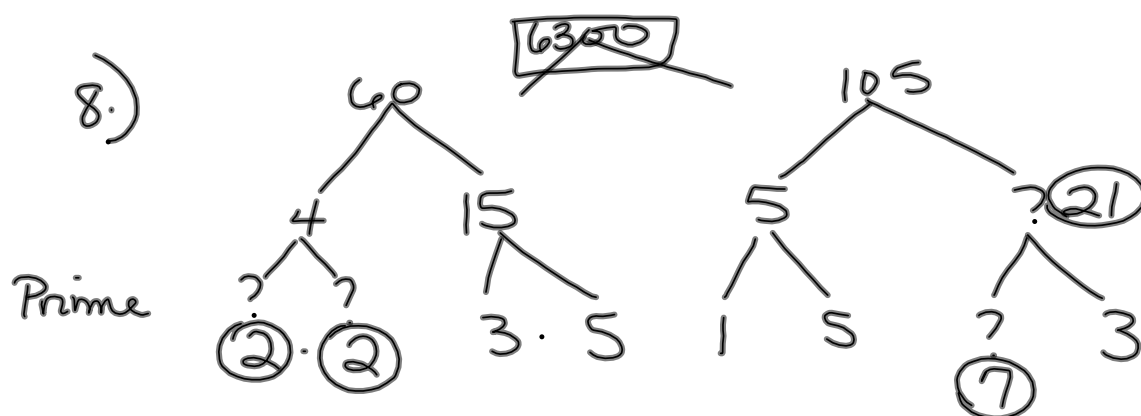
12.)

a -5
~~b~~ -4
~~c~~ 4
~~d~~ 5

$$\begin{aligned}7x - 10 &= 9x \\7(-5) &= 9(-5) \\-35 - 10 & \\-45 &= -45\end{aligned}$$

10.)





3-3 Real Number System

Rational Numbers
decimals terminate (end)
decimals repeat $4.\overline{3}$

Irrational Numbers
decimals do NOT terminate
do not repeat

π $\sqrt{19}$

$\sqrt{4,500}$

$$\sqrt{5} = 2.2$$



$$\sqrt{7} \text{ } \textcircled{<} \text{ } 2.\overline{\frac{2}{3}}$$
$$2.6457 \quad 2.\overline{6}$$
$$\begin{array}{r} 2.6666 \\ 2.645 \\ \hline \end{array}$$

↓

$$28. \quad -108.6$$
$$-108\frac{3}{5}$$