

Number Classifications

Real Numbers: All rational and irrational numbers.

Rational: can be written as a quotient of two integers

Irrational: cannot be written as a quotient of two integers.

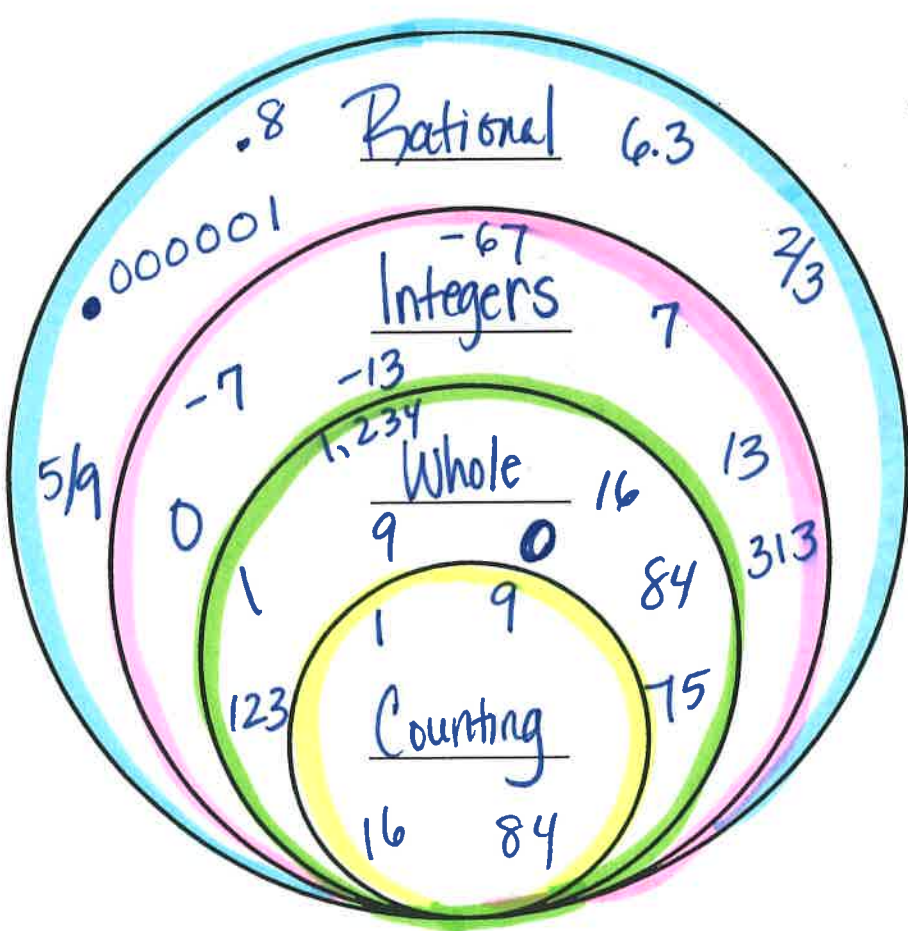
Counting: "Natural" numbers 1, 2, 3...

Whole: Counting numbers and zero 0, 1, 2, 3...

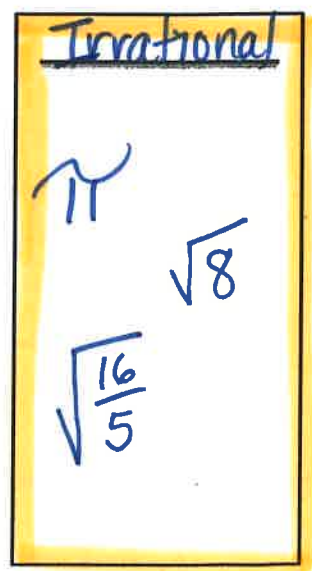
Integers: Whole numbers and their opposites ... -2, -1, 0, 1, 2...

Decimals that terminate or repeat

3.6, $\frac{1}{2}$, $-\frac{3}{7}$
 π



Real



Classify each number:

1) 5.43098 Real, Rational

2) 6 Real, Rational, Integer, whole, counting

3) 0 Real, Rational, Integer, Whole

4) π Real, Irrational

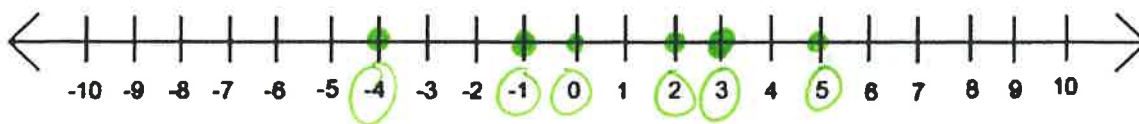
5) $-\frac{8}{4}$
(-2) Real, Rational, Integer

6) 4.4545454545... Real, Rational

Integers

| POSITIVE | NEGATIVE |
|----------|------------|
| credit | debit |
| gain | loss |
| deposit | withdrawal |
| up | down |
| above | below |
| forward | backward |
| rise | fall |
| increase | decrease |

Order the integers from least to greatest: 3, -1, -4, 2, 5, 0



-4, -1, 0, 2, 3, 5

Opposites

Positive and Negative are opposites.

Opposites: Numbers that are the same distance from zero, on either side.

Give the opposite for the numbers listed below:

1) 2 -2

2) 1 -1

3) -7 7

4) -99 99

5) 54 -54

6) 9 -9

7) -10 10

8) 0 0

Using an Integer to Represent a Situation

1) 3 miles below sea level: -3 miles

2) A gain of 25 yards: +25 yards

3) A deposit of \$27: +27 dollars

4) A loss of 8 yards: -8 yards

5) 10 degrees below zero: -10 degrees

Assignment: p. 24 #1, 3, 8-11, 22-25, 34-41

Adapted: p. 24 #3, 8-11, 22, 28, 34-41

