

Lesson #3

MES44QCS-Lesson 3

Mr. Pineda

Aim: What is the relationship between rational and irrational numbers?

Do Now – Place the following numbers from the smallest to the largest

19.64 1) 61π 3.14 7) π

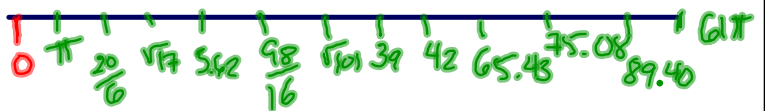
42 2) 42 5.62 8) $5.62\overline{13}$

75.08 3) $75.082\overline{106}$ 9) $\frac{98}{16} = 6.13$

10.05 4) $\sqrt{101}$ 10) $39 = 39$

65.48 5) $65.427\overline{9}$ 11) $89.396668... = 89.40$

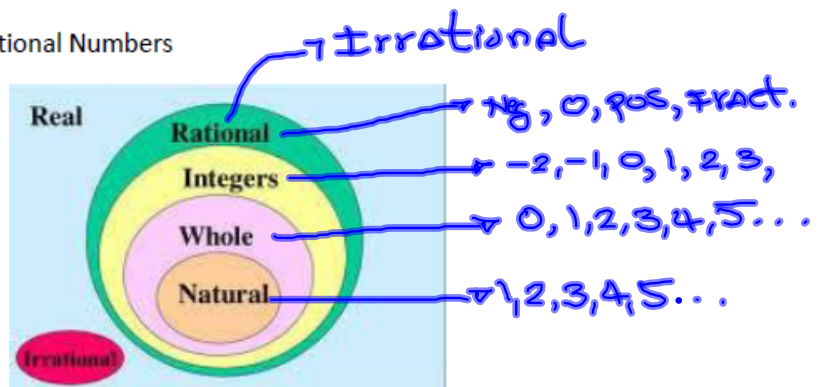
3.33 6) $\frac{20}{6}$ 12) $\sqrt{17} = 4.12$



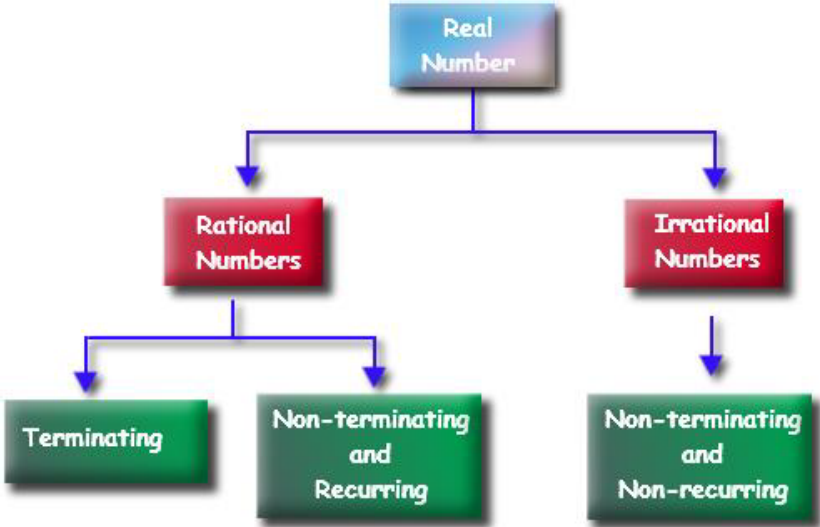
$5.62\overline{13} = 5.6213131313...$

I- Rational Numbers and Irrational Numbers

1)



2)



\mathbb{R} \mathbb{I}

3) Let's classify the Do Now Numbers into Rational and Irrational Numbers

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

11)

12)

-

II – Exercise

Classify these numbers as rational or irrational and give your reason.

1. a. 7329 \rightarrow (r)
b. $\sqrt{4} \rightarrow 2$ (r)
2. a. 0.95832758941... (I)
b. 0.5287593593593 (r)

Give an example of a number that would satisfy these rules.

3. a number that is: real, rational, whole, an integer, and natural 2
4. a number that is: real and irrational π
5. a number that is: real, rational, an integer 0

Classify each number as: [✓] real, rational, irrational, whole, natural, and integer. Give your reason.

6. a. $\frac{3}{4}$ real, rational,
b. $-\frac{12}{4}$ real, rational, integer
7. a. 0.345 345 345 real, rational,
b. -0.6473490424 real, rational

8. Give examples of rational numbers that fit between the following sets of numbers.

- a. -0.56 and -0.65
- b. -5.76 and -5.77
- c. 3.64 and 3.46

9. Which two numbers are irrational? How do you know?

a. $8-\sqrt{56}$

b. $8-\sqrt{25}$

c. $2-\sqrt{73}$

