

Name Key
Mrs. Roumbos

Date _____
8R Period _____

I. Definitions:

1) Rational Numbers

- A number that can be written as a fraction, where the denominator is not zero. Ex: $\frac{3}{4}$
- Terminating or repeating decimals. Ex: .3 or $\bar{4}$
- Integers Ex: 2, -3
- Perfect square roots. Ex: $\sqrt{4}$, $\sqrt{9}$

2) Irrational Numbers

- A number that cannot be written as a fraction.
- Non-terminating and non-repeating decimals. Ex: .4926892...
- π
- Non-perfect square roots. Ex: $\sqrt{3}$

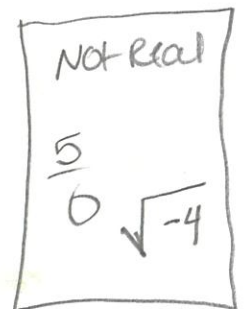
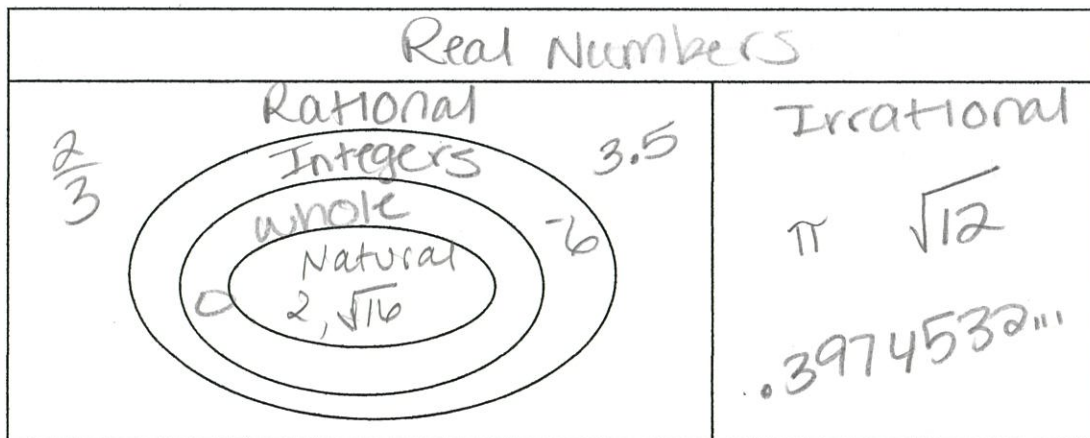
3) Real Numbers

- The set of real numbers consist of the set of rational numbers plus the set of irrational numbers, natural numbers, whole numbers, integers, decimals, and fractions.

4) Not Real Numbers

- Division by 0. Ex: $\frac{9}{0}$
- Square root of a negative number. Ex: $\sqrt{-16}$
(radicand can't be negative)

} error in the calc.



Name key
 Mrs. Roumbos

Date _____
 8R Period _____

More practice classifying numbers

Check off the set that each number is in.

	Natural Number	Whole Number	Integer	Rational Number	Irrational Number	Real Number
-81			✓	✓		✓
7.35				✓		✓
$\frac{6}{17}$				✓		✓
0		✓	✓	✓		✓
-1.8				✓		✓
$3.\overline{7}$				✓		✓
8.14251583....					✓	✓
-25			✓	✓		✓
192	✓	✓	✓	✓		✓
2.75				✓		✓
1	✓	✓	✓	✓		✓
-1.6				✓		✓
$.2525\overline{25} \dots$				✓		✓

