Rational and Irrational Numbers   Name _____
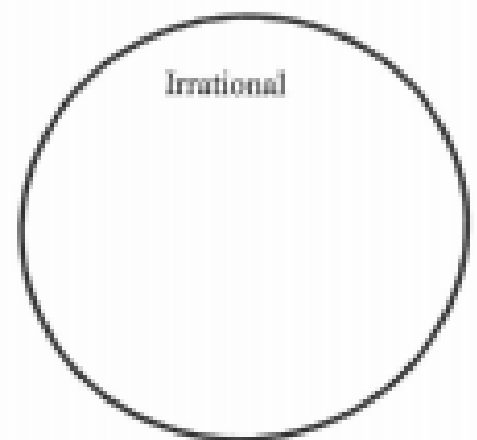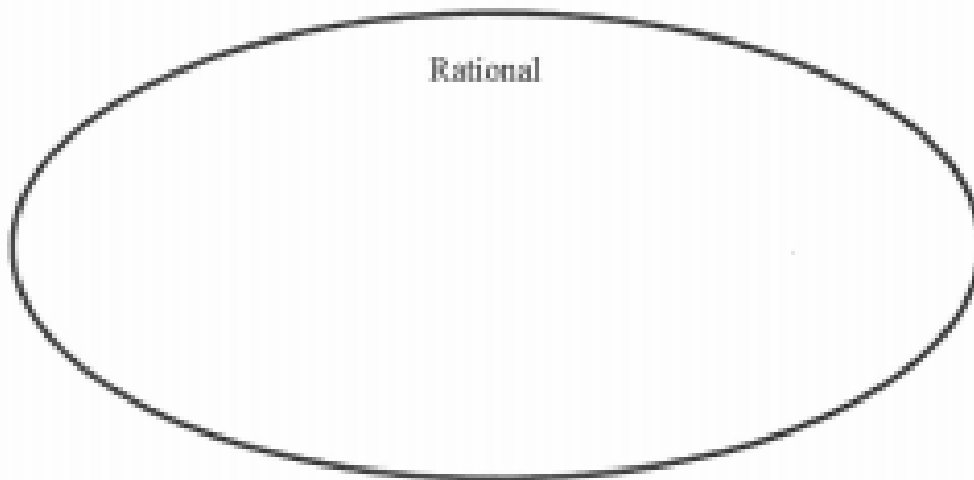
Independent Practice

1. Sort the numbers into 2 groups, rational or irrational. Write the numbers in the appropriate bubble.

0.8 $\sqrt{64}$ 0 $\sqrt{32}$ -19 $-\sqrt{100}$ 2.343443444…

$\dfrac{3}{7}$ $\sqrt{75}$ $6\dfrac{2}{7}$ $12.6\overline{7}$ $\sqrt{121}$ $\dfrac{12}{5}$ π

Rational   Irrational

2. Graph AT LEAST FIVE rational number and label each number on the number line below. You may label the number with the letter.
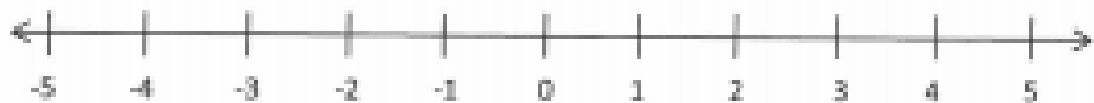
A   0.75
B $\sqrt{3}$
C $\sqrt{9}$
D $-2\dfrac{1}{2}$
E $-\dfrac{15}{10}$
F $2.\overline{6}$
G $-\sqrt{2}$
H π

$\longleftarrow$ +———+———+———+———+———+———+———+———+———+———+ $\longrightarrow$
        -5   -4   -3   -2   -1   0   1   2   3   4   5

Determine if the statement is always true,
sometimes true or never true.   A → Always
                                 S → Sometimes
                                 N → Never

| Integers are rational numbers. | Integers are negative numbers. | Whole numbers are positive numbers. | Negative fractions are integers. | Improper fractions are whole numbers. |

| Whole numbers are integers. | Fractions are rational numbers. | Natural numbers are negative numbers. | Decimals are rational numbers. | Whole numbers include negative numbers |

| Rational numbers are also integers | A fraction can be a whole number. | Rational numbers can be written as a fraction. | A number can be both an integer and a whole number. | A proper fraction is a whole number. |