NAME _____ CLASS _____ DATE _____

RETEACHING

1.1 THE SET OF REAL NUMBERS

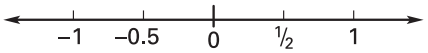
Every **real number** can be graphed on a number line. The set of **real numbers** has different subsets.

Natural numbers = {1, 2, 3,…}	The natural numbers may be referred to as the counting numbers.
Whole numbers = {0, 1, 2, 3, …}	The natural numbers and zero make up the set of whole numbers.
Integers = {…–3, –2, –1, 0, 1, 2, 3, …}	The integers are the positive and negative natural numbers and zero.

Rational numbers are numbers that can be written as integers or the quotient of two integers. Examples of rational numbers: $\frac{1}{3}$, 1, $\frac{4}{2}$, $\frac{6}{4}$, -2, $-\frac{7}{8}$, 0

Irrational numbers cannot be written as rational numbers. Examples are $\sqrt{3}$, π, $6\sqrt{2}$.

A number line can be used to graph rational numbers.



EXERCISES

Write a real number to model each situation. Then classify each number in as many ways as possible.

1. A submarine dives to 150 feet below sea level.

–150; integer, rational, real

2. A stock gains $2\frac{3}{4}$ in a one day rally.

$2\frac{3}{4}$; rational, real

3. The temperature fell 16 degrees overnight.

–16; integer, rational, real

4. Lauren was given an increase in her hourly wage of $1.25.

1.25; rational, real

5. Jackson's new car gets 13 miles more to the gallon than his old car.

13; natural, whole, integer, rational, real