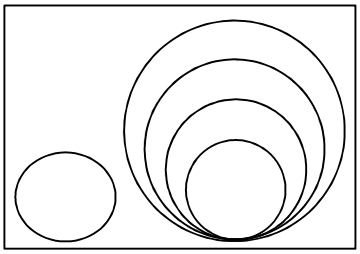
Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes
Real Numbers ( )	The **Real Numbers** consist of the following sets of numbers: • **Irrational Numbers**: Numbers in which the decimal form never terminates and does not repeat. Common examples are π and non-perfect square roots. • **Rational Numbers**: Numbers in which the decimal form either terminates or repeats. Rational numbers can always be written as a **fraction** (a/b) where a and b are integers. **Subsets of Rational Numbers:** o **Integers:** {...,-3, -2, -1, 0, 1, 2, 3, …} o **Whole Numbers:** {0, 1, 2, 3, 4, …} o **Natural Numbers:** {1, 2, 3, 4, 5, …}

Organizing the Real Numbers



Set	Letter	Examples
Irrational Numbers		
Rational Numbers		
Integers		
Whole Numbers		
Natural Numbers		

Practice! Name all sets to which each value belongs.

1. -10	**2.** $\sqrt{30}$	**3.** $1\frac{7}{9}$
4. $\frac{24}{8}$	**5.** 2.48	**6.** $-\sqrt{81}$
7. $\pi - \pi$	**8.** $\sqrt{\frac{16}{25}}$	**9.** $0.\overline{15}$
10. 109	**11.** $-\frac{8}{3}$	**12.** $\frac{\sqrt{7}}{\sqrt{7}}$