

Identify the sets to which each of the following numbers belongs.

	Number	Natural #	Whole #	Integer	Rational #	Irrational #	Real #
1)	$-\sqrt{17}$					✓	✓
2)	-2			✓	✓		✓
3)	$\frac{9}{37}$				✓		✓
4)	0		✓	✓	✓		✓
5)	$\sqrt{\frac{4}{49}} = \pm \frac{2}{7}$				✓		✓
6)	$\pi$					✓	✓
7)	0.625				✓		✓
8)	0.4444 .....				✓		✓
9)	2.010010001 ...					✓	✓
10)	$\sqrt{7}$					✓	✓
11)	-19			✓	✓		✓
12)	5	✓	✓	✓	✓		✓

Identify the Property illustrated

- 13)  $a + x = x + a$  Commutative
- 14)  $5 + (x + y) = (x + y) + 5$  Commutative
- 15)  $p(qr) = (pq)r$  Associative
- 16)  $xyz + xy = xy(z + 1)$  Distributive
- 17)  $\frac{2}{x} \cdot \frac{x}{2} = 1$  Multiplicative Inverse
- 18)  $-c + c = 0$  Additive Inverse

If  $c < 0$  and  $d > 0$  determine the sign of the solutions.

19)  $\frac{d}{c} + c$   $\frac{+}{-} + -$   
 $(-) + (-) = -$  Negative

20)  $c(d - c)^3$   
 $-(+--)^3$   
 $-(+) = \text{Negative}$