1.2 - Integers, Absolute Value and Properties



- 2. Label the side that contains the negative numbers.
- 3. Label the side that contains the positive numbers.
- 4. Place $3, \frac{3}{2}$, 3.5, 4 on the number line.
- 5. Place $-1, -\frac{9}{2}, -2.5, -5$ on the number line.

Write an integer for the following, then write its opposite.

6. three degrees below zero		
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Absolute Value of a number is the distance a number is away from zero. <u>IT IS ALWAYS POSITIVE!</u>

12.
$$|-17| =$$

$$|14.|-4|+|3|=$$

16.
$$|8| - |-3| =$$

18.
$$2|-5|-|-6| =$$

Compare each pair of numbers using <, >, or =.

22.
$$-7$$
 ____ $|-7|$ 23. $\frac{1}{2}$ ____ -5

There are <u>3 properties</u> that we will use.

Commutative Property	A + B = B + A
	$A \cdot B = B \cdot A$
Associative Property	(A+B)+C=A+(B+C)
	$(A \cdot B) \cdot C = A \cdot (B \cdot C)$
Distributive Property	$A(B+C) = A \cdot B + A \cdot C$
	$A(B-C) = A \cdot B - A \cdot C$

Name the property illustrated.

24.
$$7x + 8y = 8y + 7x$$

25.
$$r(3+4t) = 3r + 4rt$$

26.
$$(6x + 9) + 7y = 6x + (9 + 7y)$$