Aledo Independent School District

# GRADES 6-12 DISTANCE LEARNING

| School Name | Aledo High School |
|---|---|
| Grade Level | 9-12 |
| Week of | 5/3/22<br>*All assigned work due by Sunday at midnight |

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## Math Resource

**Estimated Time to Complete: 2 hours**
**Resources Needed: Topic 1-2 Notes, Assignment #1-2**

### Lesson Delivery (What do we want you to learn?):

Integers, Absolute Value and Properties

### Engage and Practice (What do we want you to do?):

1) Go over completed notes/examples Topic #1-2, Integers, Absolute Value and Properties
2) Watch the google slides video explaining the notes
3) Homework Assignment #1-2

### Create and Submit (What do we want you to turn in?):

☐ Assignment #1-2
☐
☐

### Optional Extension Opportunity (What do we want you to do if you want to extend your learning?):

I have included an activity if you would like to extend your learning. It is a Property Activity (Commutative Property, Associative Property, Distributive Property) Write the letters attached to the activity squares on the attached 3 column sheet.

Notes

# TOPIC # 1 - 2 : Integers, Absolute Value and Properties
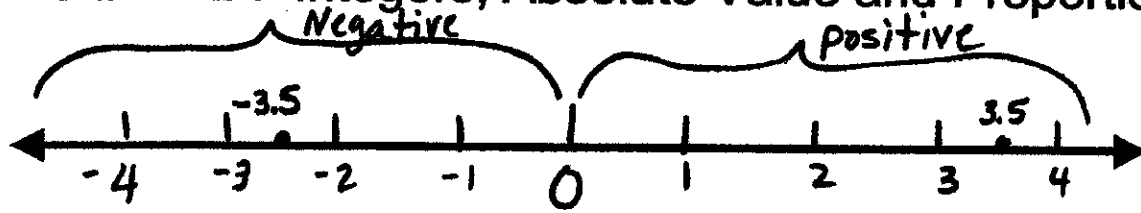


1) Label "0".
2) Label the side that contains the negative numbers.
3) Label the side that contains the positive numbers.
4) Place 3, 3.5, 4 on the number line.
5) Place –3, -3.5, -4 on the number line.

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

6)  three degrees below zero        -3        +3

7)  $20 lost trading                 -20       +20

8)  50 feet above sea level          +50       -50

9)  10 yards gained on the field     +10       -10

10) a bank deposit of $500           +500      -500

**Absolute Value** of a number is the distance a number is away from zero.  IT IS ALWAYS POSITIVE!

11) $|9|$ = __9__            12) $|-17|$ = __17__

13) $-|-8| =$ _-8_

14) $|-4| + |3| =$ _7_

$4 + 3$

15) $|12 - 3| =$ _9_

$|9|$

16) $|8| - |-3| =$ _5_

$8 - 3$

17) $3|-4| =$ _12_

$3(4)$

18) $2|-5| - |-6| =$ _4_

$2(5) \quad -6$

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

19) $5$ _<_ $8$      20) $-3$ _>_ $-9$      21) $|-4|$ _=_ $4$

22) $-7$ _<_ $|-7|$      23) $½$ _>_ $-5$

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.

$7x + 8y = 8y + 7x$     _Commutative_

$r(3 + 4t) = 3r + 4rt$     _Distributive_

$(6x + 9) + 7y = 6x + (9 + 7y)$     _Associative_

$7(3 \bullet 5) = (7 \bullet 3) 5$     _Associative_

$6x + (2y + 5z) = (2y + 5z) + 6x$     _Commutative_

$(5 \bullet 3a) \bullet 2b = (3a \bullet 5) \bullet 2b$     _Commutative_

$(a + 4) 15 = 15a + 60$     _Distributive_

NAME_____DATE_____PERIOD_____

## Integers, Absolute Value and Properties

Write a number to represent each situation. Then write the opposite of that number.

1. Five steps down      _____      _____

2. Two rooms to the right      _____      _____

3. 190 m above sea level      _____      _____

4. Nine degrees below zero      _____      _____

5. Four losses      _____      _____

Graph the given numbers on a number line.

6. 1, -5, -3, 4, 3, 0      $\longleftrightarrow$

7. -3, 1, 0, -2, -1, 2, 3      $\longleftrightarrow$

Simplify.

8. $|-5| = $ _____      9. $|12| = $ _____

10. $|-3| = $ _____

12. $|7| + |-7| = $ _____

16. $-|5| = $ _____

Homework

A # 1 - 2

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

18. 7 ___ 4

19. - 5 ___ -2

20. $|4|$ ___ -4

21. -1 ___ ⅔

22. 0 ___ -3

23. 10 ___ $|10|$

24. $|-9|$ ___ $-|-4|$

25. 1 ___ $-|4|$

Name the property illustrated.

26. (6 + 4) + 2 = 6 + (4 + 2)     _Associative_

27. 7 + 6 = 6 + 7     _____

28. 7(ab) = (7a)b     _____

29. 10x + 10y = 10(x + y)     _____

30. (5x² + x) – 3 = (x + 5x²) – 3     _____

31. 4(a – 5b) = 4a – 20b     _Distributive_

32. 3(5 + c) = (5 + c) 3     _____