

7th Grade
Sept 29, 2020

Please get out
your homework
and a pen for
checking.

Today we will:
-review HW
-do some absolute
value examples/
notes together
-start chapter
foldable on
integer
operations



HOMEWORK:

Video notes

THQ due Friday

New assignment in
ALEKS due Oct 6

OPTIONAL EXTRA
CREDIT in ALEKS
due Friday



HOMEWORK



Name _____

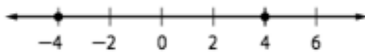
Unit ____ Lesson _____ Due Date _____

Lesson 1 Homework Practice

Integers and Absolute Value

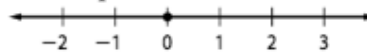
Write an integer for each situation. Identify its opposite and describe its meaning. Then graph the integer and its opposite on a number line.

1. an elevator ascends 4 floors



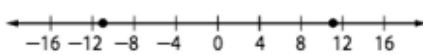
+4 or 4; -4; an elevator descends 4 floors

2. to be at par



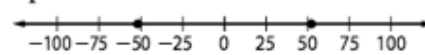
0; 0; to be at par

3. 11°F below zero



-11; +11 or 11; 11°F above zero

4. a profit of \$52 on a sale



+52 or 52; -52; a loss of \$52 on a sale

Replace each ● with <, >, or = to make a true sentence.

5. $0 \bullet -5$ **>**

6. $10 \bullet -10$ **>**

7. $-8 \bullet 3$ **<**

8. $11 \bullet 11$ **=**

9. $-18 \bullet -18$ **=**

10. $-18 \bullet 18$ **<**

11. $18 \bullet -18$ **>**

12. $18 \bullet 18$ **=**

13. $-120 \bullet -95$ **<**

14. $35 \bullet -12$ **>**

15. $-35 \bullet 12$ **<**

16. $41 \bullet 17$ **>**

Evaluate each expression.

17. $|-7|$ **7**

18. $|14|$ **14**

19. $|-11|$ **11**

20. $|-9| - |6|$ **3**

21. $|-18| - |-8|$ **10**
Handwritten: 18 - 8

22. $|-12| + |1|$ **13**
Handwritten: 12 + 1

23. $|8 - 4|$ **4**

24. $|23| - |18|$ **5**

25. $|-16| + |-22|$ **38**

Evaluate each expression if $a = -3$, $b = 0$, and $c = 1$.

26. $|a| - |c|$ **2**
Handwritten: 3 - 1

27. $|a| + |c|$ **4**

28. $|ab| + c$ **1**
Handwritten: |-3 · 0| + 1 = 0 + 1 = 1

29. $5 - |ac|$ **2**
Handwritten: 5 - |-3 · 1| = 5 - 3 = 2

30. $c + |-5|$ **6**

31. $c + |5|$ **6**

32. At 6:15 A.M. the temperature was -8°F . At 12:15 P.M. the temperature was -12°F .

At 6:16 P.M. the temperature was -10°F . Order the temperatures from least to greatest.

$-12^\circ\text{F}, -10^\circ\text{F}, -8^\circ\text{F}$

Absolute Value Examples/Notes:

Examples
like this:

$$|a| + |b| = c$$

Examples
like this:

$$|a + b| = c$$

$$\textcircled{1} \quad | -7 | + | -11 | = 18$$

$$7 + 11$$

$$\textcircled{2} \quad | 80 | + | -12 | = 92$$

$$80 + 12 = 92$$

$$\textcircled{3} \quad | -12 | - | 15 | =$$

$$12 - 15 = -3$$

$$\textcircled{4} \quad | 32 | + | 16 | =$$

$$32 + 16 = 48$$

$$\textcircled{5} \quad | 40 | - | -17 | =$$

$$40 - 17 = 23$$

$$\textcircled{1} \quad | -2 + 5 | =$$

$$\textcircled{2} \quad | -6 + 7 | =$$

$$\textcircled{3} \quad | -8 + (-14) | =$$

$$\textcircled{4} \quad | 17 + (-5) | =$$

$$\textcircled{5} \quad | -21 + (-6) | =$$

Challenge: $| -9 | - | -5 + 7 | + | 12 | =$

Today we will glue your foldable and fill out the top part:
How do I add integers with the same sign?

Under the question, write:

Add their absolute values.

The sum is positive if both integers are positive.

The sum is negative if both integers are negative.

Examples: $3+4=7$ $-2+(-4)= -6$

How do I add integers with different signs?

Under the question, write:

Subtract their absolute values.

The sum is positive if the positive integer's absolute value is greater.

The sum is negative if the negative integer's absolute value is greater.

Examples: $7+(-11) = -4$ $-2+9=7$



to row row row your boat

♪ Same sides add and keep different
Sides subtract keep the sign of
the bigger number then you'll be exact! ♪