Aim: swbat review for the integer test

Do Now:
1. check your hw answers (packet p. 35)
2. Packets will be collected and graded on Friday!!!!

HW: finish packet p. 38

Integer Test Friday.......STUDY!*
try 2 or more strategies from packet
Homework - Evaluate Variable Expressions

Evaluate the following expressions if:

\[ w = -5 \]
\[ x = 2 \]
\[ y = -3 \]

1) \( w - y + x \)
Rewrite: \( w - y + x \)
Replace: \( -5 - 3 + 2 \)
Evaluate: \( -5 + 3 + 2 \)
\[ \frac{-2 + 2}{0} \]

2) \( wxy \)
Rewrite: \( w \cdot x \cdot y \)
Replace: \( -5 \cdot 2 \cdot -3 \)
Evaluate: \( -10 \cdot -3 \)
\[ \sqrt{30} \]

3) \( -4wy \)
Rewrite: \( -4wy \)
Replace: \( -4 \cdot -5 \cdot -3 \)
Evaluate: \( -4 \cdot -5 \cdot -3 \)
\[ \frac{20}{-3} \]
\[ \frac{-60}{-3} \]

4) \( \frac{2y}{x} \)
Rewrite: \( \frac{2y}{x} \)
Replace: \( \frac{2 \cdot -3}{2 \cdot -3 \div 2} \)
Evaluate: \( \frac{-6 \div 2}{-3} \)
\[ \sqrt{-3} \]
Need More Practice?

Evaluate each expression if:

\[ a = 4 \]
\[ b = 2 \]
\[ c = 3 \]

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<thead>
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<tbody>
<tr>
<td><strong>1) ( a \div b + c )</strong></td>
<td><strong>2) 6a - (b)(c)</strong></td>
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<tr>
<td>Rewrite: ( \frac{a}{b} + c )</td>
<td>Rewrite: ( 6a - (b)c )</td>
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<tr>
<td>Replace: ( \frac{4}{2} + 3 )</td>
<td>Replace: ( 64 - (2)(3) )</td>
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<tr>
<td>Evaluate: ( \frac{2}{5} + 3 )</td>
<td>Evaluate: ( \frac{24}{6} )</td>
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<td><strong>3) 4a - (b)(c)</strong></td>
<td><strong>4) 3(a + c) - b</strong></td>
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<tr>
<td>Rewrite: ( 4a - (b)c )</td>
<td>Rewrite: ( 3(a + c) - b )</td>
<td></td>
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<tr>
<td>Replace: ( 4 \cdot 4 - (2)(3) )</td>
<td>Replace: ( 3(4 + 3) - 2 )</td>
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<tr>
<td>Evaluate: ( 16 - 6 )</td>
<td>Evaluate: ( \frac{3 \cdot 7 - 2}{\frac{21}{-2}} )</td>
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<tr>
<td>Expression</td>
<td>Rewrite</td>
<td>Replace</td>
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<tr>
<td>5) ((w + x) + y)</td>
<td>((w + x) + y)</td>
<td>((-5 + 2) + (-3))</td>
</tr>
<tr>
<td>6) ((x^2 + y) - w)</td>
<td>(\frac{(x^2 + y) - w}{2^2 + (-3)})</td>
<td>(\frac{\frac{4}{1} + (-3) + 5}{1 + 5})</td>
</tr>
<tr>
<td>7) (-y - xw)</td>
<td>(-y - xw)</td>
<td>(-\frac{-3 - (2)(-5)}{3 - (2)(-5)})</td>
</tr>
<tr>
<td>8) (\frac{2w + x}{y - 1})</td>
<td>(\frac{2w + x}{y - 1})</td>
<td>(\frac{\frac{2(-5) + 2}{-3 + 1}}{\frac{-10 + 2}{-4}})</td>
</tr>
<tr>
<td>9) ((w \cdot x) \div (-x))</td>
<td>((w \cdot x) \div (-x))</td>
<td>(\frac{(-5 \cdot 2) \div (-2)}{5})</td>
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Review for Integer Test

1) When **adding** integers with the same signs you **add** ________________.

2) When **adding** integers with different signs you **subtract** ________________.

3) When **subtracting** integers follow the rules for **adding** __________ integers.

   **BEWARE** of DOUBLE **negative**. Change them to addition.

4) When **multiplying/dividing** 2 integers with the same sign the answer will be **positive**.

5) When **multiplying/dividing** 2 integers with different signs the answer will be **negative**.

6) What is the only integer that is neither positive nor negative? **0**

7) Is 0 an integer? **yes** Why or why not? **because it is a whole number**

Simplify each of the following.

8) \(8 + (-8) = \) 0

9) \(-78 + (-15) = \) -93

10) \(-20 + 25 = \) 5

11) \(-26 - (-14) = \) -12

12) \(-26 + 2 = \) -24

13) \(-8 \cdot 9 = \) -72

14) \(-4 \cdot (-2) = \) 8

15) \(-18 \div -6 = \) 3

16) \(-18 - 10 + 16 - 5 = \) -17

17) \(-25 - 5 + 10 - 2 = \) -22

\[\frac{-28 + 16 - 5}{-12 - 5}\]

Evaluate each expression when: \(x = -2, y = -4, z = -6\)

18) \(xyz\)

19) \(11y - 2x\)

20) \(2x - z\)

21) \(\frac{yz + 1}{x - 3}\)

22) \(2(x - y)\)

23) \(\frac{z + y}{x}\)

-6 + -4 - 10

\[\frac{-6 - 4}{-2}\]

\[\frac{-6}{-2}\]

\[\frac{-10}{-2}\]

\[\frac{-6}{-2}\]

\[\frac{-10}{-2}\]

\[\frac{-6}{-2}\]

\[\frac{-10}{-2}\]
Read each problem carefully, write a number sentence and evaluate.

24) A submarine at -140 feet dives 300 feet. What is the submarine’s position after the dive?

\[ -140 + (-300) = -440 \text{ ft.} \]

The sub position is \(-440 \text{ ft}\).

25) The temperature outside was 22°F. The wind chill made it feel like -8°F. Find the difference between the real temperature and the apparent temperature.

\[ 22 - (-8) = 30 \]

The difference in temperature was 30°F.

26) The enrollment at Davis Middle School dropped by 60 students over a 5-year period. What is the average yearly drop in enrollment?

\[ 60 \div 5 = 12 \text{ students per year} \]

About 12 students were dropped.

State the additive inverse for each of the following.

27) 24 \( \quad \) 28) -44 \( \quad \) 29) 4 \( \quad \)

Compare using > or <.

30) -5 \( \quad \) 0 \( \quad \)
31) 12 \( \quad \) 15 \( \quad \)
32) -15 \( \quad \) 15 \( \quad \)
33) -9 \( \quad \) -11 \( \quad \)

Put the integers in order from least to greatest.

34) -20, 8, -31, -5, 11 \( \quad \)
35) -56, -102, 98, -58, 114 \( \quad \)
36) -102, -58, 98, 114 \( \quad \)

Find the absolute value of each integer.

37) \[ |22| = 22 \]
38) \[ |-13| = 13 \]
39) \[ |-512| = 512 \]
40) \[ |-3| = 3 \]
41) \[ |-8 + 10| = 2 \]
42) \[ |7| + |-7| = 14 \]
more practice?

1) \((18 - 4) \div 2 = \)

\[ \text{Answer: 7} \]

2) \(14 + 16 \div 4 = \)

\[ \text{Answer: 18} \]

3) \(20 - (2)(9) = \)

\[ \text{Answer: 2} \]

4) \((8+7) \div 2 = \)

\[ \text{Answer: 30} \]