

9-27-17

Aim: SWBAT apply knowledge of integers to complete contextual word problems.

HW: Test Tuesday

Do Now: Check hw, then Quiz (need pencil)

AIM: SWBAT multiply and divide integers.

DO NOW:

DO NOT COMPUTE!! State whether the answer will be POSITIVE, NEGATIVE or ZERO.

Rules for Adding/Subtracting

Same signs - Add & Keep their sign

Different signs - Subtract & think

- |  |                                    |
|--|------------------------------------|
| 1) $(-19)(-10)$<br><u>positive</u>     | 2) $-27 + 96$<br><u>positive</u>   |
| 5) $-152 \div 4$<br><u>Neg.</u>        | 6) $53 + 9$<br><u>Positive</u>     |
| 9) $\frac{-16}{-4}$<br><u>Positive</u> | 10) $32 - 12$<br><u>Positive</u>   |
| 13) $15 - 27$<br><u>Neg.</u>           | 14) $57 - 42$<br><u>Positive</u>   |
| 17) $-49 \div -7$<br><u>Positive</u>   | 18) $(-4)^{23}$<br><u>Negative</u> |

Rules for Multiplying/Dividing two Integers

Same signs - positive

Different signs - Negative



- |   |  |
|---|--|
| 3) $-24 - (-19)$<br>$-24 + 19$<br><u>Negative</u> | 4) $-80 + 80$<br><u>zero</u>               |
| 7) $(14)(7)$<br><u>Positive</u>                   | 8) $(0)(9)$<br><u>zero</u>                 |
| 11) $0 - 5$<br><u>Positive</u>                    | 12) $-42 - 50$<br><u>Negative</u>          |
| 15) $(29)(-30)(-20)$<br><u>Positive</u>           | 16) $-4 - (-4)$<br>$-4 + 4$<br><u>zero</u> |
| 19) $-7 + 7$<br><u>zero</u>                       | 20) $(-5)^{10}$<br><u>Positive</u>         |

CLASSWORK:



Evaluate.

- |                                 |                                  |   |  |
|---------------------------------|----------------------------------|---|--|
| 1) $5(-7)$<br><u>-35</u>        | 2) $-6 \cdot -3$<br><u>18</u>    | 3) $-4 \cdot 8$<br><u>-32</u>               | 4) $-91 \div -7$<br>$\begin{array}{r} 13 \\ 7 \overline{)91} \\ \underline{-7} \\ 21 \end{array}$<br><u>13</u> |
| 5) $240 \div -15$<br><u>-16</u> | 6) $\frac{-96}{3}$<br><u>-32</u> | 7) $(-5)(-3)(7)$<br>$(15)(7)$<br><u>105</u> | 8) $(7)(4)(-2)(-1)$<br>$(28)(2)$<br><u>56</u>  |

Positive, Negative, or zero?

$$5\frac{1}{3} - (-11.7)$$

$$5\frac{1}{3} + 11.7$$

Positive

$$-3\frac{1}{2} - (-1.75)$$

$$-3\frac{1}{2} + 1.75$$

Negative

$$\frac{(-1)^3 \leftarrow \text{odd}}{(-1)^2 \leftarrow \text{even}} \rightarrow \frac{-}{+} \rightarrow \text{Negative}$$

$$\frac{27\frac{1}{3}}{-5\frac{1}{8}} \rightarrow \text{Negative}$$

$$\frac{-5}{5} \rightarrow \text{Neg.}$$

$$\frac{3}{3} \rightarrow \text{Positive}$$

$$\boxed{-3\frac{1}{2} - 6.5}$$

$$\boxed{91.75 - 243}$$

+ -

+ -

$$\left(7\frac{3}{4}\right)\left(-6\frac{2}{3}\right)$$

$$(-11)\left(-1,000,000\right)$$

+ -

+ - +

$$\frac{3\frac{3}{4}}{-2\frac{2}{3}}$$

$$\frac{0}{2\frac{2}{3}}$$

$$\frac{-3\frac{3}{4}}{0}$$

+ -

zero undefined

zero undefined