

Do Now: Find the quotient. *division*

1. $48/8 = 6$
2. $108/6 = 18$
3. $5(14)/7 = 10$
 $70 \div 7$
4. $(-23 + 53)/5 = 6$
 $30 \div 5$

Oct 2-9:46 AM

2.5 Dividing Integers

7.NS.2.abc

- SWBAT divide integers to find the quotient. *positives and negatives and zero*
- SWBAT understand meanings of operations; understand how operations are related; compute fluently. *Answer to division*

Calculators: No

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Dividing Integers

Same sign

- the quotient is **positive**

Example: $8 \div 2 = 4$ $-12 \div -6 = 2$

*Pos \div Pos = Pos**Neg \div Neg = Pos*

$$\frac{\text{Pos}}{\text{Pos}} = \text{Pos}$$

$$\frac{\text{Neg}}{\text{Neg}} = \text{Pos}$$

Sep 25-3:01 PM

Different sign

- the quotient is **negative**

Example: $-18 \div 2 = -9$ $24 \div -4 = -6$

*Neg \div Pos = Neg**Pos \div Neg = Neg*

$$\frac{\text{Neg}}{\text{Pos}} = \text{Neg}$$

$$\frac{\text{Pos}}{\text{Neg}} = \text{Neg}$$

Sep 25-3:02 PM

Find the quotient.

$$1.) \frac{-40}{-8} = 5$$

Neg \div Neg = Pos

*$8 \cdot 10 = 80$
 $8 \cdot 5 = 40$*

$$2.) \frac{-14}{2} = -7$$

Neg \div Pos = Neg

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$$3.) \frac{36}{-9} = -4$$

Pos \div Neg = Neg

$$4.) \frac{0}{7} = 0$$

Zero \div Pos = 0

$$\begin{array}{r} 0 \\ 7 \overline{) 0} \\ \underline{0} \\ 0 \end{array}$$

but....

$$\frac{7}{0} = \text{Undefined}$$

\div 0 = undefined

$$\frac{0}{0} = \text{Undefined}$$

$$\begin{array}{r} 7 \\ 0 \overline{) 7} \\ \underline{0} \\ 7 \end{array}$$

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Find the quotient.

1.) $\frac{-33}{11} = -3$

3.) $\frac{0}{-4} = 0$

2.) $\frac{-25}{5} = -5$

4.) $\frac{72}{-9} = -8$

Oct 2-9:49 AM

Evaluate the expression when $a = -24$, $b = 8$, and $c = -4$

a.) $\frac{a}{b}$

$\frac{-24}{8} = -3$

Neg
Pos = Neg

b.) $\frac{ab}{c}$

$\frac{a \cdot b}{c}$

$\frac{-24(8)}{-4} = \frac{-192}{-4} = 48$

Neg
Neg = Pos

$$\begin{array}{r} 24 \\ \times 8 \\ \hline 192 \end{array}$$
$$\begin{array}{r} 48 \\ 4 \overline{)192} \\ \underline{160} \\ 32 \\ \underline{32} \\ 0 \end{array}$$

Oct 2-9:55 AM

Evaluate the expression when $d = -16$, $e = 8$ and $f = -2$

a.) $\frac{d}{e}$

b.) $\frac{ef}{d}$

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The **mean** of a data set is known as the average.

$$\text{mean} = \frac{\text{sum of the values}}{\text{number of values}}$$

add all of the values
divide
total amount

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Fidel played five rounds of a card game. His scores were -50, 41, -52, 32, and 22. Find the mean of his scores.

$$\text{mean} = \frac{-50 + 41 + (-52) + 32 + 22}{5}$$
$$= \frac{-102 + 95}{5} = \frac{-7}{5} = -1.4$$

Neg
Pos = Neg

$$\begin{array}{r} 1.4 \\ 5 \overline{)7.0} \\ \underline{5} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

Sep 25-3:13 PM

"If you cannot catch a fish, do not blame the sea."

Graded Classwork

- Working individually, complete Worksheet 2.5

#2-20 Evens Only



#1-19 Odds Only



Sep 25-3:01 PM

Exit Pass 2.5

Complete the following with positive or negative:

Positive / Positive = Pos

Positive / Negative = Neg

Negative / Positive = Neg

Negative / Negative = Pos

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Reflection of Today's Lesson**2.5 Dividing Integers**

7.NS.2.abc

SWBAT divide integers to find the ^{quotient}~~product~~.

SWBAT understand numbers and understand meanings of operations.

Oct 1-9:50 AM

Homework

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