



WARM UP GRADE 8

Friday, Sept. 23

Section 2.5 Order of Operations with Integers
continued

QUIZ FIRST

Once you are done the quiz work on
the following questions

$$\begin{aligned}
 1) & [15 + (-4) \times (-2)] - 14 \div 7 - (-5) \\
 &= [15 + (+8)] - 14 \div 7 - (-5) \\
 &= (+23) - 14 \div 7 - (-5) \\
 &= (+23) - 2 - (-5) \\
 &= 21 - (-5) \\
 &\quad \downarrow \text{add} \quad \downarrow \text{opp} \\
 &= 21 + (+5) \\
 &= +26
 \end{aligned}$$

$$\begin{aligned}
 2) & 15 \times 2 + 10 \div (-2) \\
 &= 30 + 10 \div (-2) \\
 &= 30 + (-5) \\
 &= +25
 \end{aligned}$$

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Homework Solutions

3a) $\frac{7 + (-1) \times (-3)}{4}$

$$\begin{array}{r} 7 + 3 \\ \hline 10 \end{array}$$

b) $\frac{(-18) \div (-6) - (-4)}{+3 + (+4)}$

$$\begin{array}{r} -18 \div -6 = 3 \\ 3 - (-4) = 7 \\ +3 + +4 = 7 \end{array}$$

c) $\frac{6 + (-4) - (-2)}{2 + (+2)}$

$$\begin{array}{r} 6 - 4 + 2 \\ \hline +4 \end{array}$$

d) $\frac{(-2)[7 + (-5)]}{(-2) \times (+2)}$

$$\begin{array}{r} 7 - 5 = 2 \\ -2 \times 2 = -4 \end{array}$$

e) $\frac{(-3) \times (-4) \div (-1)}{+12 \div (-1)}$

$$\begin{array}{r} -3 \times -4 = 12 \\ 12 \div -1 = -12 \end{array}$$

f) $8 - 3 + \frac{(-4) \div (-1)}{8 - 3 + 1}$

$$\begin{array}{r} -4 \div -1 = 4 \\ 8 - 3 + 1 = 6 \end{array}$$

Homework Solutions

$$5 \quad 3 - (-5) + \underline{8(-4)} \quad - \text{do mult first}$$

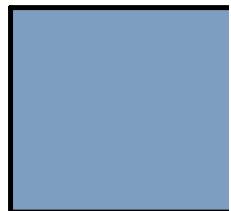
$$\underline{3 - (-5)} + (-32) \quad - \text{do subt}$$

$$3 + (+5) + (-32)$$

$$-24$$

Elijah added before subtracting which was where he made his mistake.

6a) $12 \div (2 \times 3) - 2$	b) $12 \div 2 \times \underline{(3-2)}$
$12 \div 6 - 2$	$12 \div 2 \times 1$
$2 - 2$	$\cancel{6} \times 1$
0	



Order of Operations

The order in which you answer the question is very

B - Brackets

E - Exponents

D } Division and Multiplication, in the order

M } it occurs from left to right.

A } Addition and Subtraction, in the order it

S } occurs from left to right.

From last day grade 8M did not do

Example:

Hint: Evaluate Numerator and Denominator separately

$$\frac{[16 - (-4)] \times (-3)}{3(-2)}$$

Step 1)

Step 2)

Step 3)

You Try (New Today)

$$\begin{aligned}
 \text{(a)} \quad & 5 \times 4 - (-3 + 7 \times 2) \\
 = & 5 \times 4 - (-3 + 14) \\
 = & 5 \times 4 - (+11) \\
 = & 20 - (+11) \\
 = & +9
 \end{aligned}$$

BEDMAS

$$\cancel{(b) 17 - 3^2 + 8 \times 2}$$

$$\begin{array}{r}
 20 - (+11) \\
 (+20) + (-11)
 \end{array}$$

$$\begin{aligned}
 \text{(c)} \quad & 12 \times 3 - 14 \div (-2) \\
 = & 36 - 14 \div (-2) \\
 = & 36 - (-7) \\
 = & 36 + (+7) \\
 = & +43
 \end{aligned}$$

BEDMAS

$$\begin{aligned}
 \text{(d)} \quad & 4 \times 7 - (8 - 2) \times 3 \\
 = & 4 \times 7 - (6) \times 3 \\
 = & 28 - (6) \times 3 \\
 = & 28 - 18 \\
 = & 10
 \end{aligned}$$

BEDMAS

$$\text{(e) } 2 \times (8 + 4) - (9 + 1)$$

$$\text{(f) } 64 \div 8 \times (4+1)$$

$$\text{(g) } \{3 + 7 \times (2+1)\} - 4$$

Example:

Hint: Evaluate Numerator and Denominator separately

$$\frac{4 + [18 - (-4)] \times (-2)}{2^2}$$

Step 1)

Step 2)

Step 3)

Class/Homework

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#7 ~~ace~~
#8 ~~ab~~ ~~cd~~ ~~ef~~ # 13

#9 ~~ab~~

#10 ~~b~~

#11,

#12

#13

→ find the Mean : (Add up all Numbers and
then divide the sum by the total number
of numbers)

Test Next Week

Wed Sept 26

Test

7a) $\frac{7(4)-5}{28-5}$
 $\underline{28-5}$
 23

c) $\frac{(-3)+4(-7)}{(-3)+(-28)}$
 $\underline{-31}$

e) $15 \div \frac{[10 \div (-2)]}{15 \div (-5)}$
 $\underline{-3}$

b) $6 \left[\frac{2+(-5)}{6 \times (-3)} \right]$
 $\underline{-18}$

d) $\frac{(-6)+4(-2)}{-6+(-8)}$
 $\underline{-14}$

f) $18 \div \frac{2(-6)}{9 \times (-6)}$
 $\underline{-54}$