



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

$$1) [15 + (-4) \times (-2)] - 14 \div 7 - (-5)$$

$$= [15 + (+8)] - 14 \div 7 - (-5)$$

$$= (+23) - 14 \div 7 - (-5)$$

$$= (+23) - 2 - (-5)$$

$$= (+21) - (-5)$$

$$= (+21) + (+5)$$

$$= \boxed{+26}$$

$$2) 15 \times 2 + 10 \div (-2)$$

$$= 30 + 10 \div (-2)$$

$$= 30 + (-5)$$

$$= \boxed{+25}$$

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Homework Solutions

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

$$4. \quad 7 + 3$$

$$10$$

$$b) \underline{(-18) \div (-6)} - (-4)$$

$$+3 + (+4)$$

$$+7$$

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

$$2 + (+2)$$

$$+4$$

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

$$(-2) \times (+2)$$

$$+4$$

$$e) \underline{(-3) \times (-4)} \div (-1)$$

$$+12 \div (-1)$$

$$-12$$

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

$$8 - 3 + 1$$

$$6$$

Homework Solutions

$$5 \quad 3 - (-5) + \underline{8(-4)}$$

- do mult. first

$$\underline{3 - (-5)} + (-32)$$

- do subtr.

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

$(+8)$ (-32)
 -24

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

$$6a) \quad 12 \div \underline{(2 \times 3)} - 2$$

$$12 \div 6 - 2$$

$$2 - 2$$

$$0$$

$$b) \quad 12 \div 2 \times \underline{(3 - 2)}$$

$$12 \div 2 \times 1$$

$$6 \times 1$$

$$6$$

$$7) \quad \underline{7(4)} - 5$$

$$= 28 - 5$$

$$= 23$$

$$c) \quad (-3) + \underline{4(7)}$$

$$(-3) + (+28)$$

$$+25$$

$$d) \quad (-6) + 4(-2)$$

$$(-6) + (-8)$$

$$-14$$

$$e) \quad 15 \div \underline{[10 \div (-2)]}$$

$$15 \div (-5)$$

$$-3$$



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.**

You Try (New Today)

BEDMAS

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

$$(b) \quad 17 - 3^2 + 8 \div 2$$

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

$$(d) \quad 4 \times 7 - (8 - 2) \times 3$$

$$(e) \quad 2 \times (8 + 4) - (9 + 1)$$

$$(f) \quad 64 \div 8 \times (4 + 1)$$

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

Example:

Hint: Evaluate Numerator and Denominator separately

$$\frac{4 + [18 - (-4)] \times (-2)}{2^2} \quad \text{Step 1)}$$

$$\begin{array}{l} 2^2 \rightarrow 2 \times 2 \\ \downarrow \\ \text{Repeat} \end{array} \quad \text{Step 2)}$$

$$\begin{array}{l} \uparrow \\ \text{base} \end{array} \quad \begin{array}{l} \text{two times} \\ \text{exponent} \end{array} \quad \text{Step 3)}$$

$$\begin{aligned} \text{Top: } & 4 + [18 - (-4)] \times -2 \\ & = 4 + [18 + (+4)] \times -2 \\ & = 4 + (+22) \times -2 \\ & = 4 + (-44) \\ & = -40 \end{aligned}$$

$$\begin{aligned} \text{Bottom: } & 2^2 \\ & = 2 \times 2 \\ & = 4 \end{aligned}$$

$$\frac{\text{Top}}{\text{Bottom}} = \frac{-40}{4} = \boxed{-10}$$

Class/Homework

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~~#8~~ ^{gcd} # 13

#9 ^a #15 → find the Mean : (Add up all Numbers and then divide the sum by the total number of numbers)

#10 ^a

#11, ~~#17~~

~~#12~~

Test Next Week