

WARM UP GRADE 8



Section 2.5 Order of Operations with Integers continued



B & DM AS

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

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

Page 92 # 3 to 6

Homework Solutions

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

4.

$$7 + 3$$

$$10$$

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

$$+3 + (+4)$$

$$+7$$

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

$$2 + (+2)$$

$$+4$$

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

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

$$+4$$

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

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

$$-12$$

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

$$8 - 3 + 1$$

$$6$$

Homework Solutions

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

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

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

$$-24$$

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

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

$$12 \div 6 - 2$$

$$2 - 2$$

$$0$$

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

$$12 \div 2 \times 1$$

$$6 \times 1$$

$$6$$



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

(a) $5 \times 4 - (-3 + 7 \times 2)$

$$5 \times 4 - (-3 + 14)$$

$$5 \times 4 - (+11)$$

$$20 - (+11)$$

$$+9$$

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

$$= 17 - 9 + 8 \div 2$$

$$= 17 - 9 + 4$$

$$= (+12)$$

(c) $12 \times 3 - 14 \div (-2)$

$$= 36 - 14 \div (-2)$$

$$= 36 - (-7)$$

$$= 36 + (+7)$$

$$= (+43)$$

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

$$= 4 \times 7 - (6) \times 3$$

$$= 28 - (6) \times 3$$

$$= 28 - (18)$$

$$= (+10)$$

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

$$2 \times (12) - (9 + 1)$$

$$2 \times 12 - (10)$$

$$24 - 10$$

$$+14$$

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

$$= 64 \div 8 \times (5)$$

$$= 8 \times (5)$$

$$= (+40)$$

(g) $[3 + 7 \times (2 + 1)] - 4$

$$[3 + 7 \times (3)] - 4$$

$$[3 + 21] - 4$$

$$(24) - 4$$

$$+20$$

Example:

Hint: Evaluate Numerator and Denominator separately

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

Step 2)

Top:

$$4 + [18 - (-4)] \times (-2) \quad \text{Step 3)}$$

$$4 + [18 + (+4)] \times (-2)$$

$$4 + (+22) \times (-2)$$

$$(+4) + (-44)$$

$$= -40$$

$$\text{Bottom} = 2^2 = 2 \times 2 = 4$$

$$\begin{aligned} &\text{Top} \div \text{Bottom} \\ &(-40) \div (+4) \\ &\boxed{-10} \end{aligned}$$

Class/Homework

Page 92 - 93

#7
#8

#13

#9

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

#10

#11,

#17

#12

Test Next Week

$$\begin{aligned} 7a) & \underline{7(4)} - 5 \\ & 28 - 5 \\ & 23 \end{aligned}$$

$$\begin{aligned} b) & 6 \underline{[2 + (-3)]} \\ & 6 \times (-1) \\ & -6 \end{aligned}$$

$$\begin{aligned} c) & (-3) + \underline{4(-7)} \\ & (-3) + (-28) \\ & -31 \end{aligned}$$

$$\begin{aligned} d) & (-6) + \underline{4(-2)} \\ & -6 + (-8) \\ & -14 \end{aligned}$$

$$\begin{aligned} e) & 15 \div \underline{[10 \div (-2)]} \\ & 15 \div (-5) \\ & -3 \end{aligned}$$

$$\begin{aligned} f) & \underline{18 \div 2} (-6) \\ & 9 \times (-6) \\ & -54 \end{aligned}$$