

Unit 3 Objective 7 Remediation

Evaluate Expressions Using Order of Operations



P

Parentheses

E

Exponents

M/D

Multiplication and Division – Left to Right

A/S

Addition and Subtraction – Left to Right

Example One

$$\begin{aligned} -5 - 4(3 + 2) &= -5 - 4(5) \\ &= -5 - 20 \\ &= -25 \end{aligned}$$

Complete the addition within the parentheses
Complete the multiplication
Complete the subtraction

Example Two

$$\begin{aligned} (3 - 7)(11 - 4^2) &= (3 - 7)(11 - 16) \\ &= (-4)(-5) \\ &= 20 \end{aligned}$$

Complete the exponent within the parentheses
Complete the subtraction within the parentheses
Complete the multiplication

DO NOT USE A CALCULATOR TO COMPLETE THIS REMEDIATION.

Try These

1. $-12 - 8 \div 2 =$

2. $(-4)^2 - (-6)^2 =$

3. $(4 - 2^3) - 3 \cdot 2 =$

4. $5 + 4 \cdot 3 \div 6 - 1 =$

5. $(4 - 9)^2 - (5 - 8) =$

6. $\frac{1}{2}(-30) - 5 \cdot 2 =$

7. $[4 - (-3)]^2 =$

8. $4 + 6^2 \div 9 - 3 =$

9. $\frac{2}{3}(-9) + \frac{1}{5}(15) =$

10. $-(36 \div 2)^2 - 48 \div (-4) =$

11. $[9 - (-8)] + 9 \div (-1) =$

12. $\frac{-18 \div 3 + 2}{16 \div 4} =$

13. $(-7.6) + (-3.2 - 8.8) =$

14. $8 \div \left(-\frac{1}{2}\right) + 9 \div \frac{1}{3} =$

15. $\frac{2 \cdot 5^2 - 8}{4 - 6} =$

16. $(-4.2 + 8.5)(8.1 - 10.4) =$

How Did Dregg Do On His Antarctica Test?



Cross out the letter pair next to each correct answer. For each letter pair that you DON'T cross out, write the uppercase letter in the box containing the lowercase letter.



Simplify.

- 1 $-4(-2 + 9)$
- 2 $7(-3 - 10)$
- 3 $-16(5)(-2)$
- 4 $12 - (-3) + 40$
- 5 $3 + (-8) - 17$
- 6 $-15(-4 + 1)$

- g · A** -22
- n · V** -91
- c · E** -85
- e · P** 55
- k · B** -28
- b · Y** 45
- j · I** 52
- p · L** 160

Simplify.

- 7 $-7 - (-18) + 4$
- 8 $(-2)(-19)(-5)$
- 9 $-20 - (4 - 11)$
- 10 $(-5)^2(-2)^3$
- 11 $(14 - 17)^4$
- 12 $(-6)^2 + 4(-9)$

- h · J** -200
- n · O** 64
- p · U** 0
- b · R** -190
- e · K** -150
- m · I** 81
- g · C** 15
- k · F** -13

Simplify.

- 13 $(-2 + 7)(5 - 12)$
- 14 $(-4 - 6)(-17 + 1)$
- 15 $(-2)^5 + (-5)^2$
- 16 $(-\frac{7}{8})^{24}$
- 17 $-\frac{4}{5} + \frac{2}{3}$
- 18 $(-\frac{4}{5})(\frac{2}{3})$

- k · L** 160
- m · J** -21
- g · E** -16
- f · A** $-\frac{2}{15}$
- b · C** -35
- o · S** $-\frac{8}{15}$
- h · V** -7
- p · D** $\frac{4}{15}$

Simplify.

- 19 $-2.4 + 4.9 - (-6.8)$
- 20 $15.3 + (-11.2) - 7.5$
- 21 $(-0.7)^2(-10)^3$
- 22 $\frac{2}{9}$ of -36
- 23 $\frac{5}{6} - \frac{1}{3} - (-\frac{3}{4})$
- 24 $(\frac{5}{6})(\frac{1}{3})(-\frac{3}{4})$

- h · F** -490
- d · B** -3.4
- o · D** -8
- k · T** $-\frac{7}{12}$
- b · H** -9.5
- f · R** $-\frac{5}{24}$
- m · N** 9.3
- q · E** $1\frac{1}{4}$

Evaluate if $x = -6$, $y = 2$.

- 25 $4x + 3y$
- 26 $-7xy$
- 27 $8x - 5y$
- 28 $-x + 9y - 4$
- 29 xy^2
- 30 $(xy)^2$

- a · T** -58
- l · A** -24
- f · E** -18
- h · W** 120
- i · S** 84
- o · R** 144
- q · D** 20
- m · C** -32

Evaluate if $a = -7$, $b = -4$.

- 31 $-a - 5b + 12$
- 32 $(a + b)(a - b)$
- 33 $-2a + 15b$
- 34 $-ab - 9$
- 35 $a^2 + b^2$
- 36 $(a + b)^2$

- d · S** 33
- f · N** 84
- a · T** 121
- i · F** -46
- l · S** 65
- q · E** 39
- o · L** -52
- j · O** -37



a b c d e f g h i j k l m n o p q

