

APPLIED ALGEBRA 2

Order of Operation Review

Name: _____

1.1 + 1.2

P
E
M
D
A
S

Example

$$3 \cdot 5 - (3 + 4)^2$$

PRACTICE

1) $4 \cdot 5 - 8$

2) $8 + 2 - 3^2$

3) $7 + (8 \cdot 2) - 3$

4) $(7 - 2)^3 \cdot 2$

5) $6 - 2 + 14 \div 2$

6) $7 + 8 \cdot (2 - 3)$

7) $3 - (14 + 2)$

8) $13 \cdot 9 \div (2 + 1)$

9) $(7 + 8) \cdot 2 - 3$

10) $25 \div 5 - (5 - 3)^4$

11) $[5 + (10 - 2)^2] \div 3$

12) $7 + 8 \cdot 2 - 3$

Graph the numbers on a number line. Then write the numbers in increasing order.

1. $-\frac{1}{2}, 2, \frac{13}{4}, -3, -6$

2. $0.8, \sqrt{10}, -2.4, -\sqrt{6}, \frac{9}{2}$

3. $\sqrt{15}, -4, -\frac{2}{9}, -1.6$



Identify the property shown (Closure, Commutative, Associative, Identity, Inverse, Distributive)

4. $(9+2)+4=9+(2+4)$

5. $2(5+11)=2\cdot 5+2\cdot 11$

6. $7\cdot 9=9\cdot 7$

Select and perform an operation to answer the question.

7. What is the sum of 32 and -7?

8. What is the product of 9 and -4?

9. What is the quotient of -14 and $\frac{7}{4}$?

10. What is the difference of -5 and 8?

Writing with exponents.

11. eight to the third power

12. x to the fifth power

Order of operations.

13. $14\cdot 3-2$

14. $16\div(2+6)\cdot 10$

15. $-6+3(-3+7)^2$

Evaluate the expression for the given values of x and y.

16. x^4+3y , when $x=2$, $y=-8$

17. $\frac{4(x-2y)}{x+y}$, when $x=4$, $y=-2$