

P.I. A.N.6: Evaluate expressions involving factorial(s), absolute value(s), and exponential expression(s)

Simplify:

1. $|-2|$

[A] $\frac{1}{2}$ [B] 2 [C] -2 [D] $-\frac{1}{2}$

2. $-8 - |-7 - 8| - 6$

[A] -29 [B] 3 [C] 1 [D] -1

Evaluate:

3. $|-2.3|$

4. $|-12 - (-2)|$

Simplify:

5. $+|-5 + 6| - 7 - 4$

6. $13 - 14 - |-13| + |15 - 14 + 4|$

7. $1 - 12 - |-11| - [-|-13|]$

8. $-[-(-3)] - \{-[-(-1)]\}$

9. Evaluate the expression for $a = -6$ and $b = -2$.
 $|a| + |4b|$

[A] -14 [B] 2 [C] 14 [D] -2

10. Evaluate the expression $|x| + |y| - |z|$ when $x = 3$, $y = -2$, and $z = -5$.

11. Compare the quantities in Column A and Column B.

Column A

Column B

$|a|$

$|-a|$

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The quantities are equal.

[D] The relationship cannot be determined from the information given.

12. Use the problem solving strategy *Guess and Test* to find two values each for a and b , where a is positive and b is negative, to make the statement $|a - b| = |b - a|$ true.

13. Use the problem solving strategy of *Guess and Test* to find two values each for a and b to make the statement $-|ab| = ab$ true.

Integrated Algebra Practice: A.N.6 # 1

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[1] B

[2] A

[3] 2.3

[4] 10

[5] -10

[6] -9

[7] -9

[8] -2

[9] C

[10] 0

[11] C

Answers may vary. Sample: $a = 2$ and

[12] $b = -2$, $a = 3$ and $b = -3$.

Answers may vary. Sample: $a = -2$, $b = 2$

[13] and $a = -5$, $b = 3$