6.EE.A.2: Evaluating Expressions 1a

1 What is the value of the expression $|-5x + 12|$ when $x = 5$?
1) −37
2) −13
3) 13
4) 37

2 The value of the expression $-|a - b|$ when $a = 7$ and $b = -3$ is
1) −10
2) 10
3) −4
4) 4

3 If $r = 2$ and $s = -7$, what is the value of $|r| - |s|$?
1) 5
2) −5
3) 9
4) −9

4 What is the value of the expression $2x^3y$ when $x = -2$ and $y = 3$?
1) −192
2) −108
3) −48
4) 48

5 If $x = 4$ and $y = -2$, the value of $\frac{1}{2}xy^2$ is
1) 32
2) 8
3) −4
4) −8

6 What is the value of the expression $(a^3 + b^0)^2$ when $a = -2$ and $b = 4$?
1) 64
2) 49
3) -49
4) -64

7 What is the value of the expression $-3x^2y + 4x$ when $x = -4$ and $y = 2$?
1) −112
2) −80
3) 80
4) 272

8 What is the value of $\frac{x^2 - 4y}{2}$, if $x = 4$ and $y = -3$?
1) −2
2) 2
3) 10
4) 14

9 If $x = -4$ and $y = 3$, what is the value of $x - 3y^2$?
1) −13
2) −23
3) −31
4) −85

10 If $a = 3$ and $b = -1$, what is the value of $ab - b^2$?
1) −2
2) 2
3) −4
4) 4

11 If $t = -3$, then $3t^2 + 5t + 6$ equals
1) -36
2) -6
3) 6
4) 18

12 If $x = 2$ and $y = -3$, what is the value of $2x^2 - 3xy - 2y^2$?
1) -20
2) -2
3) 8
4) 16

13 If $x = -3$, what is the value of $|x - 4| - x^2$?
1) -8
2) -2
3) 7
4) 16

14 What is the value of the expression $3a^2 - 4|a| + 6$ when $a = -3$?
1) -24
2) -9
3) 21
4) 45

15 When $x = 4$, the value of $2x^0 + x!$ is
1) 24
2) 25
3) 26
4) 28

16 Brett was given the problem: "Evaluate $2x^2 + 5$ when $x = 3$." Brett wrote that the answer was 41. Was Brett correct? Explain your answer.

6.EE.A.2: Evaluating Expressions 1a
Answer Section

1 ANS: 3
$|-5(5)+12| = |-13| = 13$

REF: 080923ia

2 ANS: 1
$-|a-b| = -|7-(-3)| = -|-10| = -10$

REF: 011010ia

3 ANS: 2
$|2| - |-7| = 2 - 7 = -5$

REF: 060522a

4 ANS: 3
$2x^3y = 2(-2)^3(3) = -48$

REF: 060807a

5 ANS: 2
$\frac{1}{2}(4)(-2)^2 = 2(4) = 8$

REF: 080617a

6 ANS: 2 REF: 011110ia

7 ANS: 1
$-3(-4)^2(2) + 4(-4) = -96 - 16 = -112$

REF: 081113ia

8 ANS: 4
$\frac{4^2 - 4(-3)}{2} = \frac{16+12}{2} = \frac{28}{2} = 14$

REF: 010406a

9 ANS: 3
$-4 - 3(3)^2 = -4 - 3(9) = -4 - 27 = -31$

REF: 080408a

10 ANS: 3
$(3)(-1) - (-1)^2 = -3 - 1 = -4$

REF: 060726a

11 ANS: 4
$3(-3)^2 + 5(-3) + 6 = 3(9) - 15 + 6 = 27 - 15 + 6 = 12 + 6 = 18$

REF: 010015a

12 ANS: 3
$2(2)^2 - 3(2)(-3) - 2(-3)^2 = 8 + 18 - 18 = 8$

REF: 010915a

13 ANS: 2
$|-3-4| - (-3)^2 = 7 - 9 = -2$

REF: 011321ia

14 ANS: 3
$3(-3)^2 - 4|-3| + 6 = 27 - 12 + 6 = 21$

REF: 061412ia

15 ANS: 3
$2(4)^0 + (4)! = 2 + 24 = 26$

REF: 011421ia

16 ANS:
No, the answer is 23. $2(3)^2 + 5 = 2(9) + 5 = 18 + 5 = 23$

REF: 060432a