

Algebra 1, Module 3, Lesson 7
Assessment Test Answers

Question 1

Simplify the algebraic expression $2(x + 5) - 3(x + 4)$.

Answers:

A $x - 2$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

15→X	
2(X+5)-3(X+4)	15
X-2	-17
	13

B $-x + 1$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

15→X	
2(X+5)-3(X+4)	15
-X+1	-17
	-14

C $x + 14$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

15→X	
2(X+5)-3(X+4)	15
X+14	-17
	29

D $-x - 2$

Correct! Double checking with the calculator is always smart.

15→X	
2(X+5)-3(X+4)	15
-X-2	-17
	-17

Question 2

Which expression is equivalent to $\frac{3}{4}(4x - 16y) + (7y - 13x)$?

Answers:

A $-10x - 25y$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

15→X	15
95→Y	95
(3/4)(4X-16Y)+(7Y-13X)	-625
-10X-25Y	-2525

B $10x - 29y$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

15→X	15
95→Y	95
(3/4)(4X-16Y)+(7Y-13X)	-625
10X-29Y	-2605

C $-10x - 5y$

Correct! Double checking with the calculator is always smart.

15→X	15
95→Y	95
(3/4)(4X-16Y)+(7Y-13X)	-625
-10X-5Y	-625

D $-10x - 29y$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

15→X	15
95→Y	95
(3/4)(4X-16Y)+(7Y-13X)	-625
-10X-29Y	-2905

Question 3

Simplify the polynomial. $-2x(6x - 3) + 8x - (14 - 16x^2)$.

Answers:

A $4x^2 + 2x - 14$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

```
15→X
-2X(6X-3)+8X-(14
-16X²)
4X²+2X-14      1096
                  916
```

B $4x^2 + 14x - 14$

Correct! Double checking with the calculator is always smart.

```
15→X
-2X(6X-3)+8X-(14
-16X²)
4X²+14X-14     1096
                  1096
```

C $-28x^2 + 14x - 14$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

```
15→X
-2X(6X-3)+8X-(14
-16X²)
-28X²+14X-14   1096
                  -6104
```

D $-28x^2 + 8x - 17$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

```
15→X
-2X(6X-3)+8X-(14
-16X²)
-28X²+8X-17    1096
                  -6197
```

Question 4

Simplify the algebraic expression $5(x^2 - 2xy) + 2(3x^2 - 12xy + 12)$.

Answers:

A $11x^2 - 34xy + 24$

Correct! Double checking with the calculator is always smart.

```
7→X
11→Y
5(X²-2XY)+2(3X²-
12XY+12)
-2055
11X²-34XY+24
-2055
```

B $11x^2 - 14xy + 24$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

```
7→X
11→Y
5(X²-2XY)+2(3X²-
12XY+12)
-2055
11X²-14XY+24
-515
```

C $11x^2 - 14xy + 12$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

```
7→X
11→Y
5(X²-2XY)+2(3X²-
12XY+12)
-2055
11X²-14XY+12
-527
```

D $11x^2 + 14xy - 24$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

```
7→X
11→Y
5(X²-2XY)+2(3X²-
12XY+12)
-2055
11X²+14XY-24
1593
```

Question 5

You are selling T-shirts. The cost of buying and designing the shirts are $3(x + 1)(x - 4)$ where x represents the number of T-shirts. Your income will be determined by the expression $2(4x^2 - 6x - 9)$. The profit you make is determined by your cost (negative) and how many you sell (positive).

Simplify the algebraic expression $-3(x + 1)(x - 4) + 2(4x^2 - 6x - 9)$ that represents the amount of profit in dollars that you'll make making and selling x T-shirts.

Answers:

A $5x^2 - 12x - 6$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

19→X	
$-3(X+1)(X-4)+2(4$	19
$X^2-6X-9)$	
$5X^2-12X-6$	1742
	1571

B $5x^2 - 3x - 6$

Correct! Double checking with the calculator is always smart.

19→X	
$-3(X+1)(X-4)+2(4$	19
$X^2-6X-9)$	
$5X^2-3X-6$	1742
	1742

C $8x^2 - 18x - 9$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

19→X	
$-3(X+1)(X-4)+2(4$	19
$X^2-6X-9)$	
$8X^2-18X-9$	1742
	2537

D $11x^2 - 12x - 6$

Incorrect. If you double checked with the calculator you would see this could not be the correct answer choice.

19→X	
$-3(X+1)(X-4)+2(4$	19
$X^2-6X-9)$	
$11X^2-12X-6$	1742
	3737