

Monomial x Polynomial Lesson Check-In **Answer Key**

MONDAY APRIL 27, 2020

Complete all questions by 5:00 pm today.

* Required

(1) What is the product of $2x^3$ and $6x^5$?

A. $8x^8$

B. $12x^8$

C. $8x^{15}$

D. $12x^{15}$

$$\begin{aligned} &(2x^3)(6x^5) \\ &(2 \cdot 6) \cdot (x^3 \cdot x^5) \\ &12x^{3+5} \\ &12x^8 \end{aligned}$$

Mark only one oval.

A.

B.

C.

D.

(2) Which expression is equivalent to $(0.5a^2)(20a^3)$?

A. $20.5a^5$

B. $20.5a^6$

C. $10a^5$

D. $10a^6$

$$\begin{aligned} &(0.5a^2)(20a^3) \\ &(0.5)(20) \cdot (a^2 \cdot a^3) \\ &10a^{2+3} \\ &10a^5 \end{aligned}$$

Mark only one oval.

A.

B.

C.

D.

(3) Which expression is equivalent to $-p(6p^2 - 4p + 2)$?

A. $-6p^2 + 4p - 2$

B. $-6p^3 + 4p^2 - 2p$

C. $6p^3 - 4p^2 + 2p$

D. $-4p^6$

Mark only one oval.

A.

B.

C.

D.



$$-p(6p^2 - 4p + 2)$$

$$(-1p^1)(6p^2) + (-1p^1)(-4p^1) + (-1p^1)(2)$$

$$-6p^3 + 4p^2 - 2p$$

(4) Which choice is **NOT** equivalent to $5x(4x^2 - 2x)$?

A. $20x^3 - 10x^2$

B. $5x^2(4x - 2)$

C. $x^3(4x - 2)$

D. $10x^2(2x - 1)$



$$5x(4x^2 - 2x)$$

$$(5x)(4x^2) + (5x)(-2x^1)$$

$$20x^3 - 10x^2$$

Mark only one oval.

A. $20x^3 - 10x^2$ ✓

B. $5x^2(4x - 2) \rightarrow 20x^3 - 10x^2$ ✓

C. $x^3(4x - 2) \rightarrow 4x^4 - 2x^3$ ✗

D. $10x^2(2x - 1) \rightarrow 20x^3 - 10x^2$ ✓

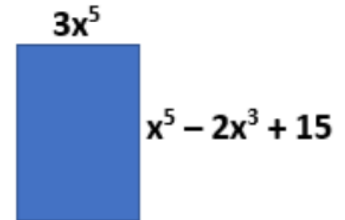
(5) Which expression represents the **area** of the rectangle?

A. $3x^{10} - 6x^8 + 45x^5$

B. $8x^5 - 4x^3 + 30$

C. $3x^{25} - 6x^{15} + 45x^5$

D. $4x^5 - 2x^3 + 15$



Mark only one oval.

A.

B.

C.

D.

$3x^5(x^5 - 2x^3 + 15)$
 $(3x^5)(x^5) + (3x^5)(-2x^3) + (3x^5)(15)$
 $3x^{10} - 6x^8 + 45x^5$

(6) Which expression(s) below are equivalent to $6x^3 + 12x^4$?

I. $3x(2x^2 + 4x^3)$

II. $6x^3(x + 2x)$

III. $x^2(6x + 12x^2)$

Mark only one oval.

A. I and II, only

B. I and III, only

C. II and III, only

D. I, II, and III

I. $3x(2x^2 + 4x^3) \rightarrow 6x^3 + 12x^4$ ✓

II. $6x^3(x + 2x) \rightarrow 6x^4 + 12x^4 \rightarrow 18x^4$ ✗

III. $x^2(6x + 12x^2) \rightarrow 6x^3 + 12x^4$ ✓