

# Polynomials Add/Subtract Check-In ANSWER KEY

WEDNESDAY APRIL 22, 2020

Complete all questions by 5:00 pm today.

\* Required

(1) Choose the correct answer to the question. \*

1 point

Find the sum of  $4x^2 - 3x + 6$  and  $-7x^2 + 3x + 6$ .

A.  $7x^2 + 6x + 12$

B.  $-3x^2 + 6x + 12$

C.  $3x^2 - 12$

D.  $-3x^2 + 12$

A.

B.

C.

D.

$$(4x^2 - 3x + 6) + (-7x^2 + 3x + 6)$$

$$\underline{4x^2} - \underline{3x} + \underline{6} - \underline{7x^2} + \underline{3x} + \underline{6}$$

$$-3x^2 + 12$$

(2) Choose the correct answer to the question. \*

1 point

When simplified, which expression below is equivalent to  $11x^2 - 2x + 4$ ?

A.  $(10x^2 - 2x + 3) + (-x^2 + 1)$

B.  $(10x^2 - 2x + 3) + (x^2 - 1)$

C.  $(10x^2 - 2x + 3) - (-x^2 + 1)$

D.  $(10x^2 - 2x + 3) - (-x^2 - 1)$

A. Drop parentheses & combine like terms:  $\underline{10x^2} - \underline{2x} + \underline{3} - \underline{x^2} + \underline{1} \rightarrow 9x^2 - 2x + 4$

B. Drop parentheses & combine like terms:  $\underline{10x^2} - \underline{2x} + \underline{3} + \underline{x^2} - \underline{1} \rightarrow 11x^2 - 2x + 2$

C. Distribute -1 & combine like terms:  $\underline{10x^2} - \underline{2x} + \underline{3} + \underline{x^2} - \underline{1} \rightarrow 11x^2 - 2x + 2$

D. Distribute -1 & combine like terms:  $\underline{10x^2} - \underline{2x} + \underline{3} + \underline{x^2} + \underline{1} \rightarrow 11x^2 - 2x + 4$

(3) Choose the correct answer to the question. \*

1 point

What is the result when  $3x^2 - x - 2$  is subtracted from  $6x^2 + 4x - 5$ ?

A.  $3x^2 + 5x - 3$

B.  $9x^2 + 5x + 14$

C.  $3x^2 + 5x - 7$

D.  $9x^2 + 5x - 7$

from comes first

- A.  
 B.  
 C.  
 D.

$$\begin{aligned} &(6x^2 + 4x - 5) - (3x^2 - x - 2) \\ &(6x^2 + 4x - 5) - 1(3x^2 - x - 2) \quad \text{distribute -1} \\ &\underline{6x^2 + 4x - 5} - \underline{3x^2 + x + 2} \\ &3x^2 + 5x - 3 \end{aligned}$$

(4) Choose the correct answer to the question. \*

1 point

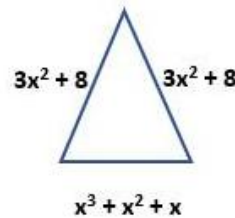
Which expression represents the **perimeter** of the accompanying isosceles triangle?

A.  $6x^3 + x^2 + x + 16$

B.  $7x^3 + x^2 + 16$

C.  $x^3 + 4x^2 + x + 8$

D.  $x^3 + 7x^2 + x + 16$



- A.  
 B.  
 C.  
 D.

**Perimeter = sum of all the sides**  
 $(3x^2 + 8) + (3x^2 + 8) + (x^3 + x^2 + x)$   
 $\underline{3x^2 + 8} + \underline{3x^2 + 8} + \underline{x^3 + x^2 + x}$   
 $x^3 + 7x^2 + x + 16$