

1.5 Multiply Polynomials

NOTES

ALGEBRA

Write your
questions here!



Monomial to Polynomial

$$2x^3(x^2 + 7x - 5)$$

Binomial to Polynomial

$$(3y - 1)(2y - 3)$$

Multiply using a Table

$$(2x^2 - 1)(3x^2 + 5x - 2)$$

Perfect Square

Difference of Squares

$$(x + 5)(x - 5)$$

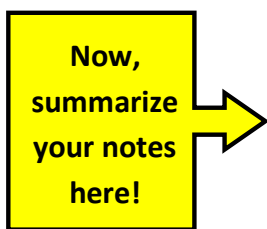
Try it!

$$3m^2(3m^2 - 4m + 2)$$

$$(2x - 3)^2$$

$$(3h + 5)(2h^2 + 4h - 5)$$

SUMMARY:



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PRACTICE

Find the product.

1. $2x(3x^2 - 4x + 5)$

2. $3a(5a^6 - 2a^3 + a)$

3. $(4g^2 - 2)(-4g)$

4. $(2x + 1)(4x + 3)$

5. $(2p + 1)(3p - 2)$

6. $(2a + b)(2a + 3b)$

7. $(5a - 3)^2$

8. $(3k - 1)(3k^2 - 11k - 8)$

9. $2(4m + 3)(2m - 1)$

10. $(3c + 4)^2$

11. $(n + 1)(2n^3 - n^2 + n + 12)$

12. $(3b^2 + 5)(b^2 - 5b + 4)$

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WRAP UP

Find each product.

1. $(3x + 2)^2$

2. $(d^2 + 1)(2d^2 - 5d + 7)$

3. The expression $3(2m + 5)(8 - 4m)$ is equivalent to which of the following expressions?

A) $-24m^2 - 12m + 120$

B) $-72m^2 - 36m + 360$

C) $-24m^2 + 28m + 40$

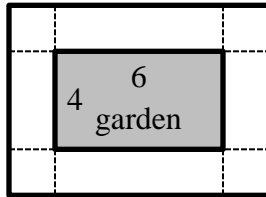
D) $-24m^2 + 42m + 120$

E) $-72m^2 + 144m + 360$

EXIT TICKET

Tommy has a tomato garden that is 4 foot by 6 foot. He would like to put a gravel path around his garden as shown below. He is not sure how wide he wants to make the path so let's just call it x . Write an expression to represent the perimeter and area of the entire garden including the path in terms of x , the width of the path.

Area:



Perimeter:

Use your expressions to find both the area and perimeter of the entire garden including path if the path is 2 foot wide.

SMP #4