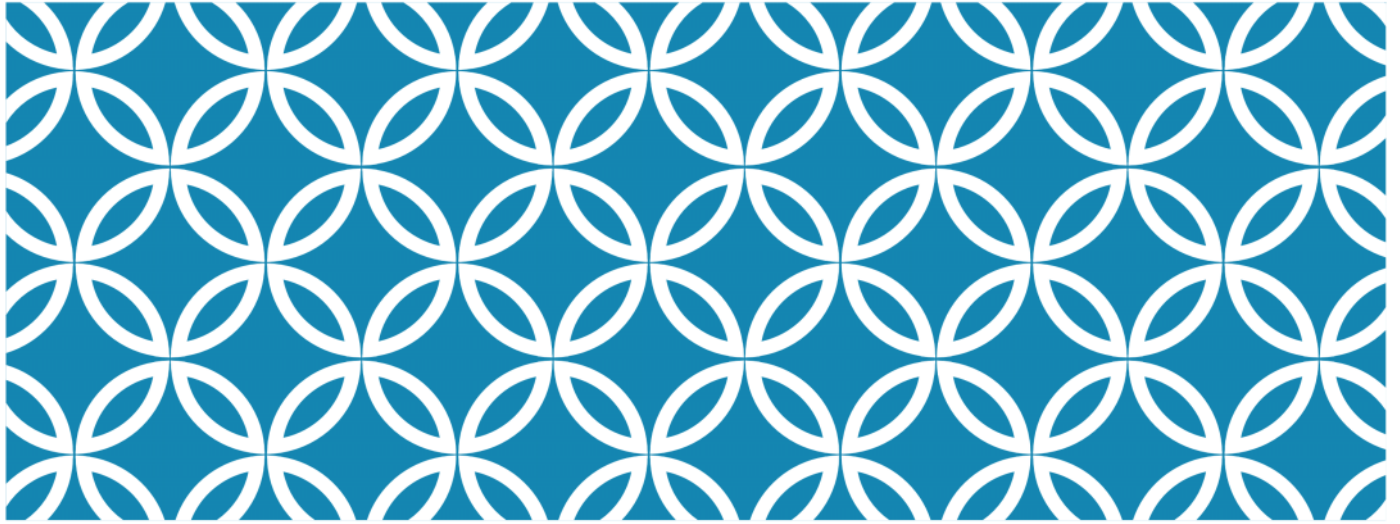


! DAILY QUEST:

Evaluate the expression when $x = \underline{-3}$ and $y = \underline{4}$

$$\begin{aligned} 1) & 5x + 2(y - x)^2 \\ & 5(-3) + 2(4 + +3)^2 \\ & 5(-3) + 2(7)^2 \\ & 5(-3) + 2(49) \\ & -15 + 98 \\ & \boxed{83} \end{aligned}$$

$$\begin{aligned} 2) & 3x^2 + 8x \div 4 \\ & 3(-3)^2 + 8(-3) \div 4 \\ & 3(9) + 8(-3) \div 4 \\ & 27 - 24 \div 4 \\ & 27 - 6 \\ & \boxed{21} \end{aligned}$$



LESSON 14.4 MULTIPLY POLYNOMIALS

Goal: To identify, evaluate and use operations with expressions/polynomials.

Obj: SWBAT multiply polynomials.

PROBLEM 1:

Find the Product.

$$\begin{array}{c} \text{Row} \\ \text{Monomial} \end{array} \underline{6x} \begin{array}{c} \text{Columns} \\ \text{Trinomial} \end{array} (3x^2 + 4x - 2)$$

$$= \boxed{18x^3 + 24x^2 - 12x} \quad \text{Answer}$$

	$3x^2$	$4x$	-2
$6x$	$18x^3$	$24x^2$	$-12x$

PROBLEM 2:

Find the Product.
 Rows columns
 $(x + 3)(x + 4)$
 binomial binomial

	x	4
x	x^2	$4x$
3	$3x$	12

$$x^2 + 7x + 12$$

Rows columns
 $(x - 2)(x + 7)$

	x	7
x	x^2	$7x$
-2	$-2x$	-14

$$x^2 + 5x - 14$$

answer

PROBLEM 2A:

Find the Product.

$$(x + 5)(x - 6)$$

	x	-6
x	x^2	$-6x$
5	$5x$	-30

$x^2 - 1x - 30$

$$(x - 3)(x - 8)$$

	x	-8
x	x^2	$-8x$
-3	$-3x$	24

$x^2 - 11x + 24$

PROBLEM 2B:

Find the Product.

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

	x	3
$2x^2$	$2x^3$	$6x^2$
-1	$-1x$	-3

$2x^3 + 6x^2 - 1x - 3$

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

	$2x^2$	-5
$3x^2$	$6x^4$	$-15x^2$
2	$4x^2$	-10

$6x^4 - 11x^2 - 10$

PROBLEM 2C:

Find the Product.

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

$$(2x - 1)(2x + 1)$$

PROBLEM 2D:

Find the Product.

$$(x - 6)(x + 6)$$

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

	x	6
x	x^2	$6x$
-6	$-6x$	-36

$x^2 - 36$

PROBLEM 3:

Find the Product.

Rows Columns
 $(x - 3)$ $(x^2 + 4x - 2)$ ←

	x^2	$4x$	-2
x	x^3	$4x^2$	$-2x$
-3	$-3x^2$	$-12x$	6

$x^3 + x^2 - 14x + 6$

ANSWER →

PROBLEM 3A:

Find the Product.

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

	$2x^2$	$-5x$	7
x	$2x^3$	$-5x^2$	$7x$
3	$6x^2$	$-15x$	21

$$2x^3 + x^2 - 8x + 21$$

PROBLEM 3B:

Find the Product.

$$(2x - 1)(3x^2 + 6x - 4)$$

PROBLEM 3C:

Find the Product.

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

EXIT SLIP

Find the product.

$$(2x - 3)(x + 4)$$

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