10.2 Multiplying Polynomials

NOTES

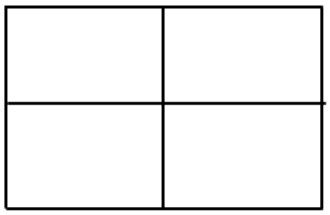
Write your questions here!

Multiplying a Monomial times a Polynomial

$-3x^2(4x^3 - 2x^2 + x - 10)$

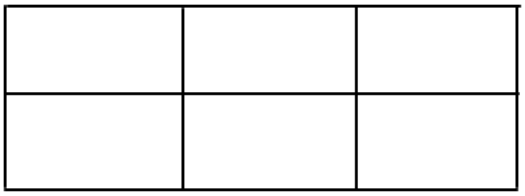
Multiplying using a table

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



Binomial times a Trinomial

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



Another Way: Multiplying Horizontally

$(2x - 5)^2$

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

Try these:

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

$(7g^2 + 4g + 1)(g - 8)$

SUMMARY:

Now, summarize your notes here!

10.2 Multiplying Polynomials

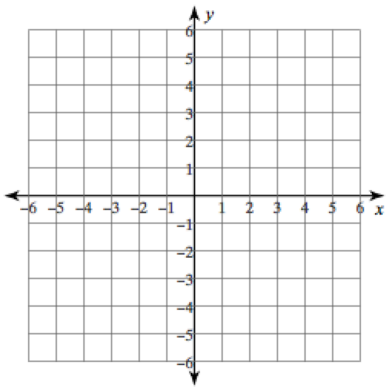
PRACTICE

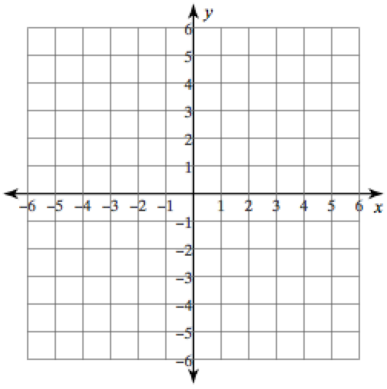
DIRECTIONS: Find the product.		
1) $x(2x^2 - 3x + 9)$	2) $z^2(4z^4 + z^3 - 11z^2 - 6)$	3) $-a^5(-9a^2 + 5a + 13)$
4) (x+2)(x-3)	5) (4b – 3)(b-7)	6) (3k – 1)((3k + 1)

7) $(y-6)^2$	8) $(7w+5)(11w-3)$	9) $(s+4)(s^2+6s-5)$

10) $(5x+2)(-3x^2+4x-1)$	11) $(6z^2+z-1)(9z-5)$
12) $p(2p-3)+(p-3)(p+3)$	13) $-3b^2(b+11)-(4b-5)(3b-2)$

SKILLZ REVIEW

Graph.	List all pairs of numbers that multiply to the given number.	Which number pair contains the largest perfect square?
1) $3x+2y=8$ 	2) 24	3) Use 24

4) 3x + 4y = 12	5) 54	6) Use 54
		

10.2 Multiplying Polynomials

APPLICATION

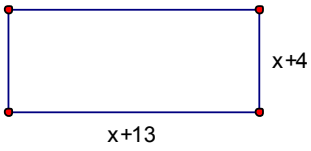
Directions: Simplify each expression.

1) $2a^4(3a^2 - 5a + 1)$

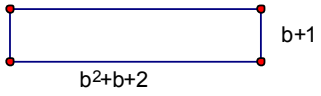
2) $(5b - 3)(2b^2 + 3b - 5)$

Directions: Write a polynomial that represents the area of each shape.

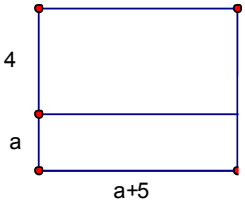
3)



4)



5)



6) The measure of a side of a square is x units. A new square is formed with each side 6 units longer than the original square's side.

a) Draw and label the original and new square.

b) Write an expression to represent the area of the new square.