



Warm Up

Factor each of the following:

1) $3x^4 - 15x^2 + 24x$

$3x(x^3 - 5x + 8)$

2) $18a^3b^6 + 27ab^2 - 36ab$

$9ab(a^2b^5 + 3b - 4)$

3) $-21rt - 49r^4 - 35r^3t$

$7r(-3t - 7r^3 - 5r^2t)$

4) $6xy^2 + 7x^2y + 2y$

$y(6xy + 7x^2 + 2)$

Simplify then Factor:

1) $2x^3 - 5x + 7 + 6x^3 + x + 1$

$8x^3 - 4x + 8$

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

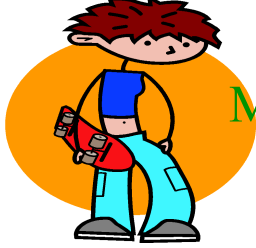
2) $-7n^3y - 5n^2y^2 + 2ny^2 - n^2y^3 - n^3y - 12ny$

$-8n^3y - 6n^2y^2 + 2ny^2 - 12ny$


$2ny(-4n^2 - 3ny^2 + y - 6)$

Polynomials






Monomial 1 term $2xy$



Binomial 2 terms $2xy + 3z$



Trinomial 3 terms $2xy + 3z - 4x$

Terms are separated by “+” and “-“ signs.



Simplify:

$$\underbrace{2x - 7} + \underbrace{3x^2} - \underbrace{5x} - 2 - \underbrace{2x^2}$$

$$-3x + x^2 - 9$$

$$x^2 - 3x - 9$$



Oct 9-10:39 PM

Distributing Factor

3.7 Multiplying Polynomials

Expand & Simplify



Rainbow





Skittles
TASTE THE RAINBOW

Oct 9-10:54 PM

Expand and collect like terms.

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

$4x - 8 - 2x - 6$ (Expand)
 $2x - 14$ (Collect/Simplify)

8

$$x \cdot x^3 = x^4$$

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

$2x^4 - 10x^3 - 2x^2 - 10x$

9

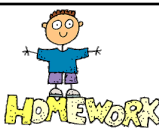
$$4(3xy + 7x - 5) - 3(2x + 5xy - 1)$$

$$12xy + 28x - 20 - 6x - 15xy + 3 \quad (\text{expand})$$

(simplify)

HW 1- is on the
back dog. (55)

11



HOMEWORK

Numbers, Relations & Functions 10 Name _____

Multiplying Polynomials Date _____

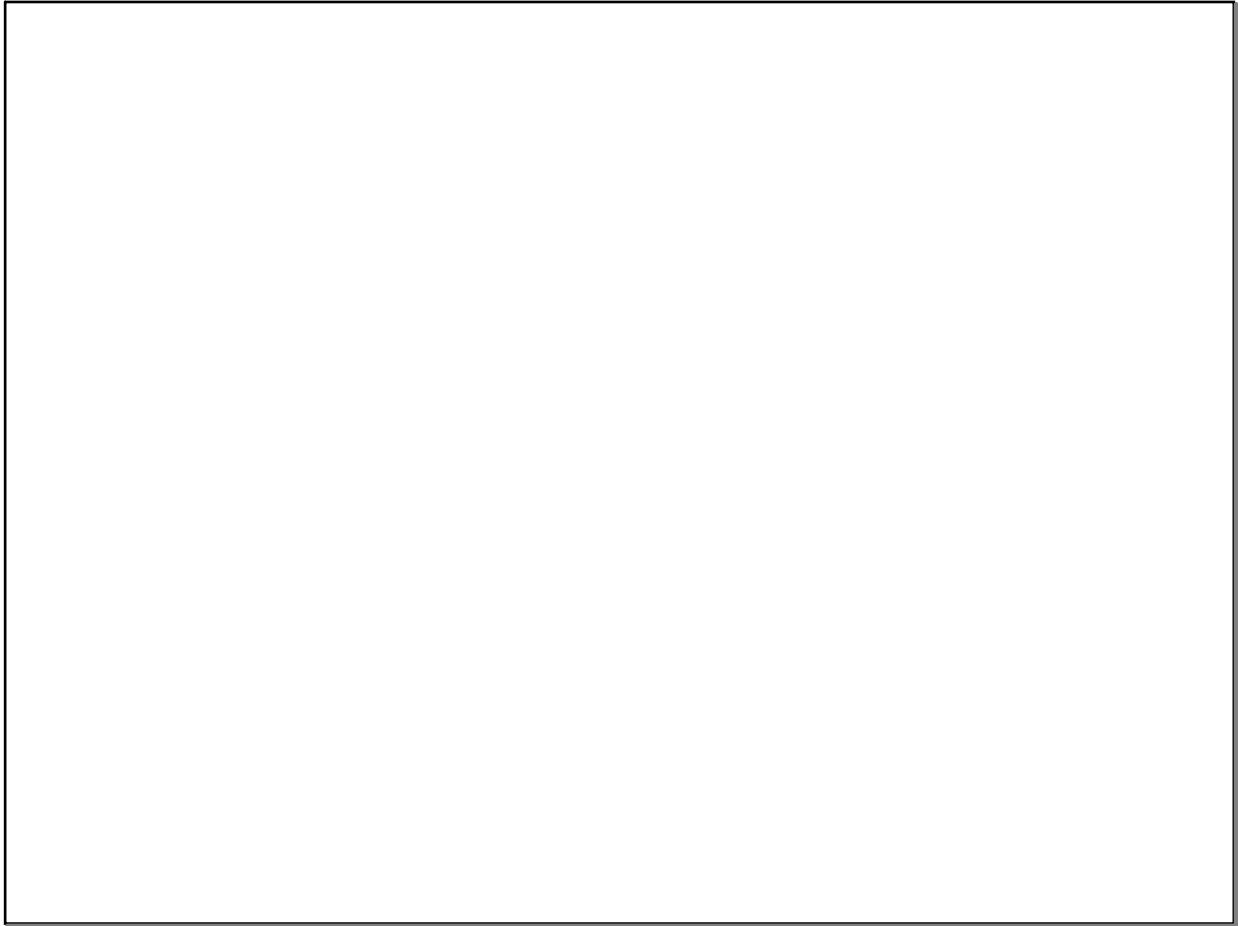
Find each product.

1) $5(6b + 3)$	2) $8(6r + 3)$
3) $2(8x + y)$	4) $5mn(3m + 2n)$
5) $7(x - 7y)$	6) $2mn(8m - 2n)$

Correct mistakes on quiz when you are done!!

7) $(4x - 2y)(6x + 6y)$	8) $(6x + 3y)(4x - 7y)$
9) $(2x + 5y)(7x - 8y)$	10) $(3x + 6y)(5x - 8y)$
11) $(5x - 4y)(5x^2 - 4xy + 6y^2)$	12) $(8x - 7y)(6x^2 + 8xy + 3y^2)$
13) $(6a^2 - 2a - 3)(8a + 2)$	14) $(2k^2 + 8k - 2)(7k + 4)$
15) $(7a^2 - 2ab + 2b^2)(a^2 - 2ab - 8b^2)$	16) $(x^2 - 4xy + 2y^2)(x^2 - 2xy - 7y^2)$

Oct 11-8:52 PM



Oct 1-2:25 PM