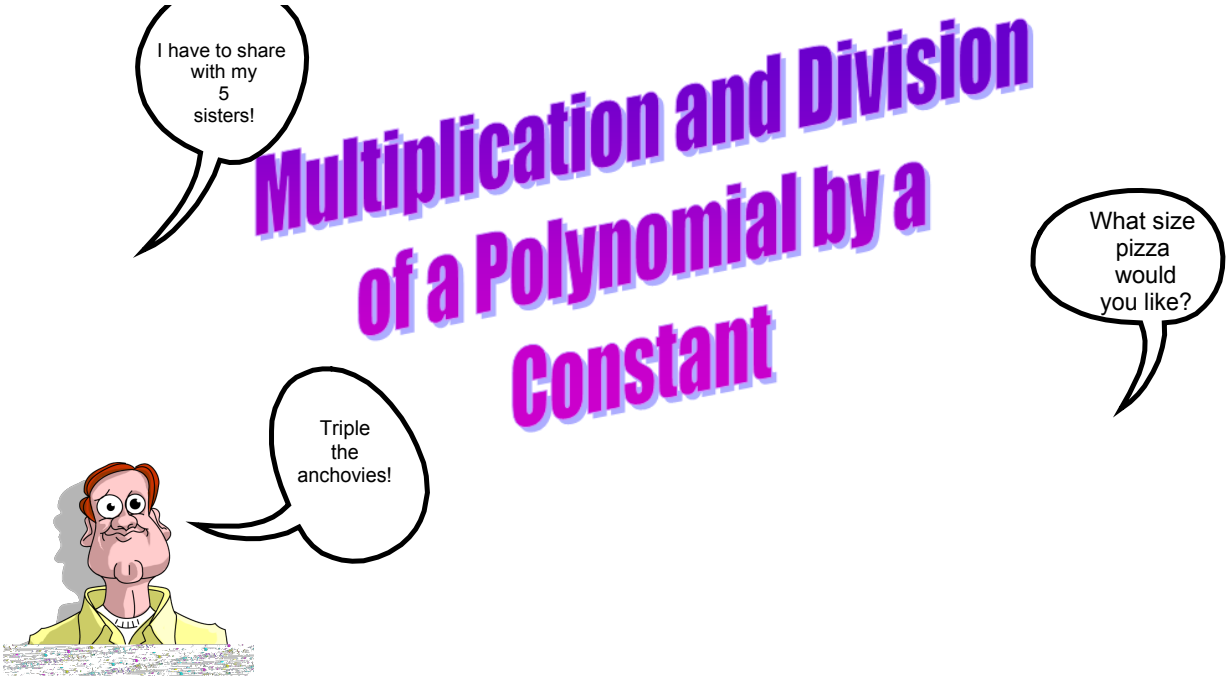
Multiplication and Division of a Polynomial by a Constant



Things you already know!!	Things you need to know :)
4 x 5 = 20	
(4)(5)= 20	(4)(m)= 4m
4(5)= 20	6(z)= 6z

4(6w)

24w

(7)(x)(y)

7xy

Do you notice the difference?

$2(x)(y)$

$= 2xy$

$2(x + y)$

$2x + 2y$

$$4(w^2 + v)$$

$4w^2 + 4v$

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

$= 5x - 10 + 5x - 3 - 5x - 7$

$= 5x - 20$ ✓

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

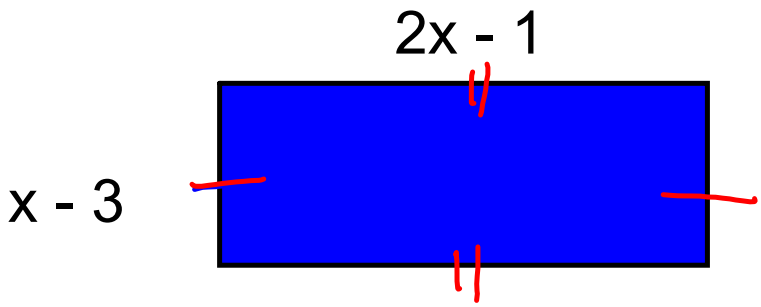
$$-1x + 1 \quad +6x - 8 \quad +6x + 1$$

$$= 11x - 6$$

$$2(x - 2) - 1(5x - 3) + 3(3x - 8)$$

$$2x - 4 - 5x + 3 + 9x - 24$$

$$= +6x - 25$$



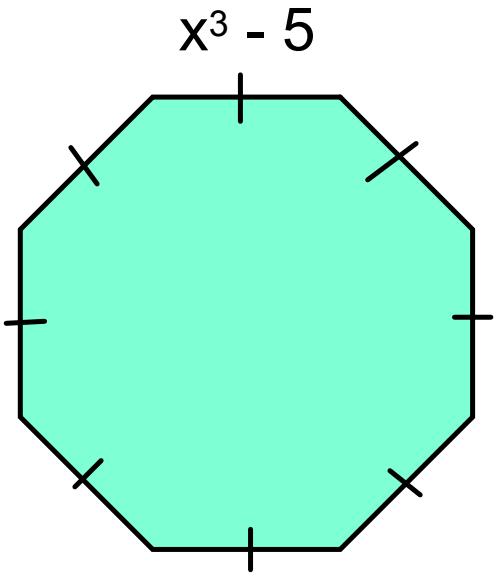
$(x-3)+(x-3)+(2x-1)+(2x-1)$

or

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

$2x-6+4x-2$

$=6x-8$



$8(x^3-5)$

$= 8x^3-45$

Hint!(words)

The Ultimate!

$= 24w^2 - 28p + 44$

Pg. 235

#8, 12, 13

Pg. 247

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