

$$2.a)$$
$$12d \div 4$$
$$\frac{12d}{4}$$

# Warm-Up Quiz

$$-2(-7h+4)$$
$$14h-8$$



## Warm-Up

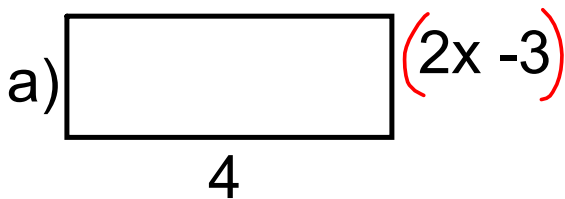
$$\begin{array}{l}
 \text{A. } -4(3x^2 + 5x - 3) \\
 -12x^2 - 20x + 12
 \end{array}$$

$$\begin{array}{l}
 \text{B) } \frac{-12x^2 + 4x - 16}{4} \\
 -\frac{12x^2}{4} + \frac{4x}{4} - \frac{16}{4} \\
 -3x^2 + 1x - 4
 \end{array}$$

January 8, 2020

$$\begin{array}{l}
 \text{C. } \frac{-4(x^2 + 8x - 16)}{2} \\
 -\frac{4x^2}{2} - \frac{32x}{2} + \frac{64}{2} \\
 -2x^2 - 16x + 32
 \end{array}$$

Write the multiplication sentence modelled by the rectangle.

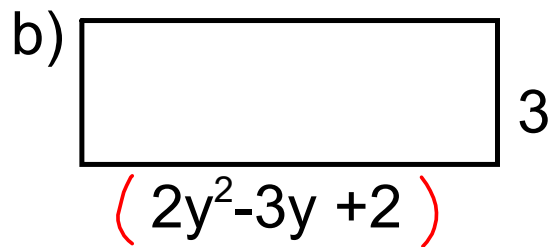


$$A = bh \\ = 4(2x - 3)$$

$$A: 8x - 12$$

solve if  $x=3$

$$8(3) - 12 \\ 24 - 12 \\ \textcircled{12}$$



$$A = bh \\ = (2y^2 - 3y + 2)3$$

$$\left. \begin{array}{l} A = bh \\ = (2y^2 - 3y + 2)3 \end{array} \right\} A = bh \\ = 3(2y^2 - 3y + 2)$$

$$A: 6y^2 - 9y + 6$$

solve if  $y=3$

$$6(3)^2 - 9(3) + 6 \\ 6(9) - 27 + 6 \\ 54 - 27 + 6 \\ \textcircled{33}$$

① multiplication sentence

② simplified polynomial for Area

## Section 5.6 Multiplying and Dividing a Polynomial by a Monomial

# Remember Laws of Exponents

When Multiplying---Base is the same ADD the exponent

$$a) \quad 3(2r) = 6r$$

$$b) \quad (3r^1)(2r^1) = 6r^2$$

$$c) \quad (3r^2)(4r^1) = 12r^3$$

Determine the product

A.  $2x(3x + 4)$   
 $6x^2 + 8x$

B.  $-2x(-3x - 4)$   
 $6x^2 + 8x$

$4(2x)$   
 $2x(4)$

c)  $-2(3x - 5)$   
 $-6x + 10$

d)  $3x(2x^2 - 4x + 3)$   
 $6x^3 - 12x^2 + 9x$

Determine the product

$$e) 8x^1(2x^1 - 3y)$$

$$16x^2 - 24yx$$

$$16x^2 - 24xy$$

Dividing a Monomial and a Binomial by a Monomial  
base is same subtract the exponents

A. 
$$\frac{-10m^2}{2m} - 5m$$

$$\left. \begin{array}{l} -10m^2 \\ -5m \end{array} \right\} \frac{-10m}{2m}$$

B. 
$$\frac{30k^2 - 18k}{-6k}$$

$$\frac{30k^2}{-6k} - \frac{18k}{-6k}$$

$$-5k + 3$$

$$k^0 = 1$$

C. 
$$\frac{-6r^2 + 4r}{2r}$$

$$\frac{-6r^2}{2r} + \frac{4r}{2r}$$

$$-3r + 2$$

$$6r^2(2r^{-1})$$

$$12r^3$$

Determine the quotient

$$\frac{24x^2 + 6xy}{3x}$$

$$\frac{24x^2}{3x} + \frac{6xy}{3x}$$

$$8x + 2y$$



Find the product or quotient

add exponents

A.  $-3x(-5x^2 - 10x + 5)$

$$15x^3 + 30x^2 - 15x$$

subtract exponents

B.  $\frac{-15y^2 - 18y}{3y}$

$$\frac{-15y^2}{3y} - \frac{18y}{3y}$$

$$-5y - 6$$