## Section 5.5 - Multiplying and ...olynomial by a Constant

### Multiply a Binomial and a Trinomial by a Constant

Ex:

1. Find the product... ****Multiply each term in the brackets by "5"**

$5(3a^2 - 4a + 7)$

$(5 \times 3a^2) + (5 \times -4a) + (5 \times 7)$

$15a^2 - 20a + 35$

2. $-4(5b^2 - 8b)$
   $-20b^2 + 32b$

3. $7(6y^2 - 8y + 9)$
   $42y^2 - 56y + 63$

4. $4(7a)$
   $28a$

5. $(-3r)(7)$
   $-21r$

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

7. $7(1 - 4x)$
   $7 - 28x$

8. $-2(4t^2 - 3r^2 + 19tv - 6v - t)$
   $-8t^2 + 6r^2 - 28tv + 12v + 2t$

# Divide a Polynomial by a Constant

Ex: Find the quotient

1. $\frac{-9v^2 + 6v}{3}$

Divide each term by the denominator "3"

$= \frac{-9v^2}{3} + \frac{6v}{3}$

$= -3v^2 + 2v$

2. $\frac{12r^2 + 8}{4}$

$\frac{12r^2}{4} + \frac{8}{4}$

$3r^2 + 2$

3. $\frac{7x^2 - 7x + 21}{-7}$

$\frac{7x^2}{-7} + \frac{-7x}{-7} + \frac{21}{-7}$

$-x^2 + x - 3$

Try this... $\frac{10ab - 30a^2 - 15c}{5}$

Pull

Book Work: p. 246, #'s 5, 6, 7, 8, 9, 11 - 23
Extra Practice 5