## Module 1 – Special Products and Factoring Lesson 1 – Special Products

Find all products for each section. Show all work.

Find the product.

1. 
$$(2m-3n)(5m+2n)$$

2. 
$$(7x-y)(2x-y)$$

3. 
$$(9+2d)(8-d)$$

4. 
$$(3b+5c)(b+8c)$$

5. 
$$(4a-2b)(2a+3b)$$

Find the squares. 1.  $(8+5k)^2$ 

1. 
$$(8+5k)^2$$

2. 
$$(5x-9y)^2$$

3. 
$$(2a+3b)^2$$

4. 
$$(7r-2s)^2$$

5. 
$$(11v + xy)^2$$

Find the product of the sum and difference of the two binomials.

1. 
$$(10f+3g)(10f-3g)$$

2. 
$$(5x+8y)(5x-8y)$$

3. 
$$(6a-14b)(6a+14b)$$

4. 
$$(17+cd)(17-cd)$$

5. 
$$\left(\frac{3}{4}a - \frac{1}{2}b\right)\left(\frac{3}{4}a + \frac{1}{2}b\right)$$

Find the product of a binomial and a trinomial 1.  $(2x+3y)(4x^2-6xy+9y^2)$ 

1. 
$$(2x+3y)(4x^2-6xy+9y^2)$$

2. 
$$(5a-2b)(25a^2+10ab+4b^2)$$

3. 
$$(x+4)(x^2-4x+16)$$

4. 
$$(d-e)(d^2+de+e^2)$$

5. 
$$(6s+5t)(36s^2-30st+25t^2)$$

## Find the cube of a binomial 1. $(x+2)^3$

1. 
$$(x+2)^3$$

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

3. 
$$(2x+5)^3$$

4. 
$$(6x-7)^3$$

5. 
$$(5r+6s)^3$$