Standard ASSE.2 **8.4 Multiplying Special Cases** Unit 7

*SWBAT expand polynomials in vertex form and simplify them into standard form.*

**Expanding Monomials**

Expand (do not simplify) each of the following:

1. (2xy)2
2. (5xyz)3
3. (4x)4

**The Square of a Binomial: Do NOT distribute an exponent to a binomial!**

Expand, then FOIL or Box the following.

1. (a – b)2 =
2. (a + b)2 =

Expand, and then simplify the following:

1. (3x + 4y)2 =
2. (x – 3)2 =

**Got it?** What is the simpler form of each product?

1. (2x + 9)2
2. (n – 4m)2

**Expanding a Binomial in Vertex Form**

What is a simpler form of each product?

1. 2(x – 6)2
2. 3(x + 2)2
3. 4(x – 1)2

What is a simpler form of each product?

1. 3(x + 1)2 + 1
2. 2(x – 4)2 – 5
3. -4(x – 2)2 + 6

**Finding Area of Shaded Regions**

**Area shaded = Area Big – Area Little**

Find the area of the shaded region below. Show all work.



Find the area of the shaded region below. Show all work!

