Name:_____ Date:_____

Unit 1 **Lesson 2**

Do Now:
Simplify:

a) $(2x^2 – 4) + (x^2 + 3x – 3)$

b) $(9b^2 + 4b) – (b – 8)$

c) $x^2 \bullet x^3$

AIM: MULTIPLYING POLYNOMIALS

1) $m \bullet m^8$

2) $2^4 \bullet 2^5$

3) $7b^2 \bullet b^5$

4) $(5x)(6xy)$

5) $–2x^2 \bullet 5x^4$

RULES:

- Multiply coefficients
- Multiply like variables (keep the base, _____ exponents)

6) $(x^2)^3$

7) $(y^4)^{10}$

8) $(5x^4)^2$

9) $(-2x^3)^6$

POWER RULE:

- ❖ Raise coefficient to the outside power
- ❖ Keep the base, and _____ exponents.

10) 3(6c+3d)

11) -5m(4m-6n)

12) $5r^2s^2(-2r^2 + 3rs)$

Distributive property:

a (b + c)=

13) Rewrite 5x + 2x using the distributive property.

14) What is the area of a rectangle whose length is represented by 6x - 2 and whose width is represented by 3x?

15) $3(b^3 + 8b) – 2(b^3 + 12)$