

Name: _____

8A; Algebra 1

Date: _____

Period _____

Homework

I. Find the product:

1) $(6xy)(-2z)$

2) $(5a^2)(-5a)$

3) $(2r^2s^3)(-4r^3s)$

4) $(-\frac{1}{4}d^2)(24ad)$

5) $(-2x)^2$

6) $(3a^2b)^2$

7) $-8\left(\frac{3}{4}x - \frac{1}{2}\right)$

8) $2ab(6a^3 - 3b^2)$

9) $5x(2x^2 - 3x + 7)$

II. Distribute and Combine Like Terms:

10) $4 - 3(2x + 5)$

11) $(x^2 - 3x + 7) - (x^2 - 6x - 2)$

12) $(3x^2 + 8x - 5) - (-2x^2 + 4x - 10)$

13) $2x(3x - 4) + 5(3x - 4)$

14) $2x^2(x + 4) - 3x(5x + 1)$

15) The width of a rectangle is represented by w . The length is three more than twice the width.

(a) Express the perimeter of the rectangle as a binomial in terms of w .

(b) Express the area of the rectangle as a binomial in terms of w .

III. Simplify each of the following if possible. If not possible, explain why.

16) $x^3 + x^4$

17) $x^3 \cdot x^4$

18) $x^4 - x^3$