

Name: _____
Date: _____
Class: _____

Algebra
Unit 1
HW 1-9

1) Show in expanded form (do not simplify): $(2x^2)^4$

2) Simplify the following (if one cannot be simplified, state that):

a) $x^3x^7x^4$

b) $z^3a^4z^5a^2$

c) $2^3x^5y^7$

3) Simplify: $(-2x^2)^3$

4) Simplify: $\frac{(3x^2y^3)^4}{9x^3y}$

5) In a small stadium, the first row has 7 seats, 2nd row has 11, 3rd row has 15, and so on up to the last row, which is row 15. Which of the following expressions would fit this situation – $2r + 5$ or $4r + 3$ (r is the number of rows)? How many seats would you expect to be in the last row?

6) Simplify: $(x - 6)(x + 8) + (2x - 5)(x - 9)$

7) Evaluate when $y = -4$:

$$5 - 4x + 2x^2$$

8) Simplify: $(x - y)^2$