

Name: _____

Date: _____

Chapter 6 Practice Test

1) Define a) variable b) constant and c) coefficient.

a)

b)

c)

2) Consider the mathematical phrase $2x^2 - 3y + 9$

a) Is it an equation or expression?

b) List all variables.

c) List all coefficients.

d) List all constants

e) List each term separated by a comma.

3) Evaluate for $x = 1$ and $y = -5$

a) $2x^2 + 4y - 1$

b) $y^2 - 5x$

4) Simplify. a) $3m + 4 - m$ b) $w^2 - 5w - 3 + w^2$ c) $17 - 3n + 5r - 3 + 3n - 3r$

a) _____ b) _____ c) _____

5) Solve. Check (a) only. a) $y + 7 = -3$ b) $-3x = 27$ c) $\frac{-x}{3} = -39$

a)

Check:

b)

c)

6) Solve. Check (b) only. a) $4x - 4 = -20$ b) $\frac{x}{2} + 6 = 12$ c) $-x + 8 = -3x + 4$ d) $12 - 5y + 2y = 4y$

a)

b)

Check:

c)

d)

7) Expand and simplify if necessary.

a) $7(3x + 2)$ b) $-(2y + x^2)$ c) $4(x + 2) + 2(x^2 - 5)$ d) $2(x^2 + 3) - (2x^2 - 2x + 1)$

a)

b)

c)

d)

8) Solve. Do a check for (a). a) $-2(w + 2) = 6$

b) $3(x - 4) + 2(x + 2) = 3(x - 3) - 15$

a)

Check:

b)

9) Solve. (a) $\frac{3}{-4} = \frac{x}{12}$ (b) $\frac{(x-3)}{-2} = \frac{(x+2)}{-4}$ (c) $\frac{x}{3} - \frac{(x+11)}{4} = x$