

Section 5.2 Extra Practice

1. Determine

i) the value of the coefficient

ii) the number of variables for each term

a) $-t$ i) _____ ii) _____ b) $4d^2$ i) _____ ii) _____

c) 12 i) _____ ii) _____ d) $-8de$ i) _____ ii) _____

e) b i) _____ ii) _____ f) $-c^2$ i) _____ ii) _____

2. Match the expression with its description by placing the correct letter in the blank.

A $-4x$ _____ a constant

B 17 _____ a binomial with two variables

C $2ab$ _____ -1 is the coefficient

D $3y^2 - 2y$ _____ -4 is the coefficient

E $-m$ _____ a binomial with a degree of 2

F $5x - 3y$ _____ a monomial with a degree of 2

3. Circle the like terms in each group.

a) $4x, 4y, x^2, -x, y^2$

b) $6, 2x, -2.5, 3y, -0.1$

c) $a, 4b, -3ab, 7a, 1.5a$

d) $-f, 3ef, f^2, -6f^2, 5e$

e) $6st, -10s, \frac{3}{4}st, -st, t$

f) $pq, -0.6p^2, 5q, -p^2, 10p^2$

g) $0.5jk, -jk, j^2, 6jk, -k$

h) $\frac{2}{5}, \frac{1}{2}r, 0.12, r^2, 9$

4. Collect like terms.

a) $3m - m^2 - 6 + 3m^2$

b) $-4k - k^2 + 5k - 7k^2 + 8$

c) $-c - c^2 + 3c + c^2$

d) $7 - 10 + 5n - n + 9 + 8n$

e) $-2b^2 - 7b + 3b^2 - 8b + b$

f) $w^2 - 3w - 8w^2 + 7w^2 + 10w$

g) $-2a - 1 - a - 7 - 5a$

h) $3s + 6 - 6s^2 - 8 + 7s - 2s^2$

Name: _____

Date: _____

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(continued)

5. A rectangle's length is 7 cm greater than its width, w .

a) Draw the rectangle and label its dimensions.

b) Write the expression to find its perimeter.

c) Collect like terms.

6. The cost of publishing the school yearbook was \$440. The yearbook committee priced the yearbook at \$8.

a) Write an expression that represents the profit, p , for the number of yearbooks sold, n .

b) How many yearbooks need to be sold for the yearbook committee to break even?