Name: $\qquad$ Date: $\qquad$

## Chapter 5 Review

## Key Words

For \#1 to \#6, write the letter that best matches each description.
You may use each letter more than once or not at all.

1. $3 w$ is a like term $\qquad$
2. has 3 terms $\qquad$
3. monomial $\qquad$
4. opposite polynomial to $3 x-1$ $\qquad$
5. polynomial with a degree of 2 $\qquad$
6. has the constant term 3 $\qquad$ F $-3 x-1$
G $3 f-1$
A $-3 x+1$
B $-4 d+3$
C $1-3 x^{2}$
D $-w$
E $x-6 y+2$

### 5.1 The Language of Mathematics, pages 242-250

monomial, binomial, trinomial, or polynomial
7. Complete the table.

| Expression | Degree | Number of Terms | Type of Polynomial |
| :--- | :--- | :--- | :--- |
| a) $5-p+p x-p^{2}$ |  |  |  |
| b) $3 f-6$ |  |  |  |
| c) $-2 a$ |  |  |  |
| d) $3 y^{2}+5 x y-27 x^{2}+2$ |  |  |  |

8. a) What is the degree of the polynomial $a b-7 a+3$ ? $\qquad$
b) Explain how to find the degree of a term.
$\qquad$
c) Explain how to find the degree of a polynomial.
$\qquad$
$\qquad$
9. Draw algebra tiles to model the expression $3 x^{2}-2 x+1$.

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$\qquad$
10. What expression does each model show?

11. Used videos cost $\$ 10$. Used books cost $\$ 4$.

The expression $10 v+4 b$ describes the value of sales.
a) What does the variable $v$ stand for? $\qquad$
b) What does the variable $b$ stand for? $\qquad$
c) How much money would you receive if you sold 6 video games and 11 books?

Sentence: $\qquad$

### 5.2 Equivalent Expressions, pages 252-261

12. Complete the table.

| Expression | Coefficient | Variable(s) | Exponent(s) of the <br> Variable(s) |
| :--- | :--- | :--- | :---: |
| a) $8 x y^{2}$ |  |  |  |
| b) $-c^{2}$ |  |  |  |

13. Circle the like terms: $-2 x^{2} 3 x y \quad x^{2} \quad 5.3 y \quad 2$
14. a) The diagram shows an expression. Redraw the tiles so like terms are together.

b) Write an expression for the simplified answer. $\qquad$
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15. Combine like terms to simplify the expressions.

a) $3-2 x+1+5 x$
b) $1-c+4+2 c-3+6 c$
16. The perimeter of a shape is $(4 x)+(3 x-1)+(x+3)+(x-2)$.

Each part in brackets is the length of one side.
a) Draw and label a shape for
b) Simplify the expression for the perimeter. this expression.

### 5.3 Adding and Subtracting Polynomials, pages 263-273

17. What is the opposite of each polynomial?
a) 7-a 7 $\qquad$ b) $x^{2}-2 x+4 \rightarrow$ $\qquad$
18. $\left(3 x^{2}+4 x-9\right)+\left(2-5 x-x^{2}\right)$
a) Find the sum using algebra tiles.
b) Find the sum using symbols.
19. Combine like terms.

Add the opposite.
a) $(-p+7)+(4 p-5)$
b) $\left(a^{2}-a-2\right)-\left(5-3 a^{2}+6 a\right)$

