Name _____ Date _____ Class _____

LESSON 1-9

Practice A

Simplifying Algebraic Expressions

Identify like terms in each list.

1. $6a$ b a 17 $4b$ 32 $17a$

_____

2. x x^2 $3x$ 3 $3x^2$ 6

_____

3. 2 $6z$ $6z^2$ z $17z$ z^2 3

_____

4. m 8 $8m^2$ $8m$ m^2 $12m$ 18

_____

5. $2p$ $22p$ $56q$ 12^2, q 34

_____

6. d d^2 $15d^2$ $2d$ 4^2 $5d$ 44

_____

Combine like terms.

7. $6p^2 + 3p^2$

_____

8. $9x - 6x$

_____

9. $a^2 + b^2 + 2a^2 + 5b^2$

_____

10. $7h^2 + 3 - 2h^2 + 4$

_____

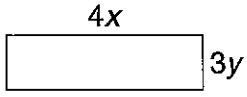
11. $3x + 3y + x + y + z$

_____

12. $5b + 5b + 6b^2 - 10 - 3b$

_____

13. Find the perimeter of the rectangle. Combine like terms.



A $4x + 3y$

B $8x + 6y$

C $12xy$

D $4x^2 + 3y^2$

Name _____ Date _____ Class _____

LESSON 1-9

Practice B

Simplifying Algebraic Expressions

Identify like terms in each list.

1. $3a \quad b^2 \quad b^3 \quad 4b^2 \quad 4 \quad 5a$

_____

2. $x \quad x^4 \quad 4x \quad 4x^2 \quad 4x^4 \quad 3x^2$

_____

3. $6m \quad 6m^2 \quad n^2 \quad 2n \quad 2 \quad 4m \quad 5n$

_____

4. $12s \quad 7s^4 \quad 9s \quad s^2 \quad 5 \quad 5s^4 \quad 2$

_____

Simplify. Justify your steps using the Commutative, Associative, and Distributive Properties when necessary.

5. $2p + 22q^2 - p$

_____

6. $x^2 + 3x^2 - 4^2$

_____

7. $n^4 + n^3 + 3n - n - n^3$

_____

8. $4a + 4b + 2 - 2a + 5b - 1$

_____

9. $32m^2 + 14n^2 - 12m^2 + 5n - 3$

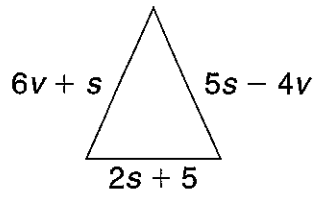
_____

10. $2h^2 + 3g - 2h^2 + 2^2 - 3 + 4g$

_____

11. Write an expression for the perimeter of the figure at the right. Then simplify the expression.

_____



12. Write an expression for the combined perimeters of the figures at the right. Then simplify the expression.

_____