

Name: Key

Hour: _____

Combine like terms.

1. $6p^2 + 3p^2$

$$9p^2$$

2. $9x - 6x$

$$3x$$

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

$$3a^2 + 6b^2$$

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

$$5h^2 + 7$$

5. $3x + 3y + x + y + z$

$$4x + 4y + z$$

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

$$7b + 6b^2 - 10$$

7. $2p + 22q^2 - p$

$$22q^2 + p$$

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

$$4x^2 - 16$$

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

$$n^4 + 2n$$

10. $4a + 4b + 2 - 2a + 5b + 1$

$$2a + 9b + 3$$

11. $32m^2 + 14n^2 - 12m^2 + 5n - 3$

$$20m^2 + 14n^2 + 5n - 3$$

12. $2h^2 + 3g - 2h^2 + 2^2 - 3 + 4g$

$$7g + 2^2 - 3$$

13. $8k^2 + 4k - 3k^2 - 3^2 - k + 5$

$$5k^2 + 3k - 4$$

14. $10x^3 + 5y^2 + 2xy - 4y^2 + 4xy - x^3$

$$9x^3 + y^2 + 6xy$$

15. $3a + 2b^2 + 6c + a - 2c + b^2 + c$

$$4a + 3b^2 + 5c$$

16. $12x^4 + 6x^2 + 5x^3 - x^2 + 2xy - 8x^4$

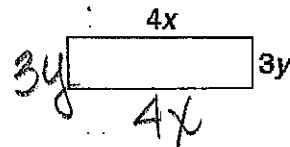
$$4x^4 + 5x^2 + 5x^3 + 2xy$$

17. $9p^6 + q^2 + 6p + 5q^2 + 5p - 5q^2$

$$9p^6 + q^2 + 11p$$

18. $h^2 + 4h + 4h^2 - 6 + 4 + h^2 + 7h$

$$6h^2 + 10h - 2$$

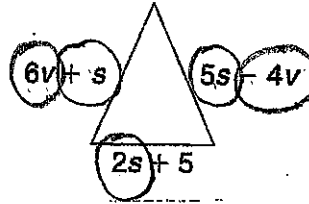
19. Find the perimeter of the rectangle.
Combine like terms.

$$8x + 6y$$

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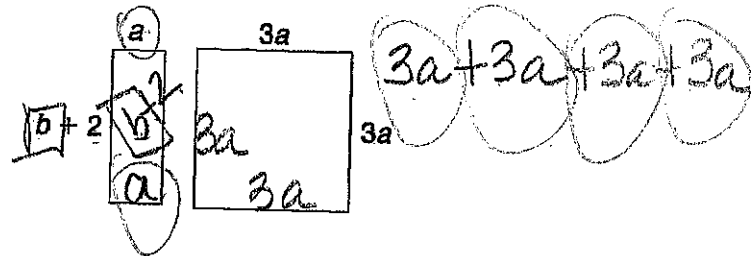
Hour: _____

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



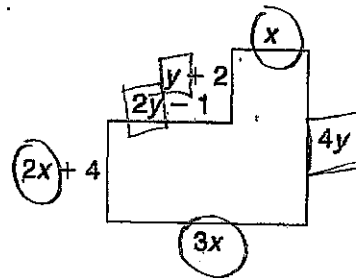
$$\underline{2v + 8s + 5}$$

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



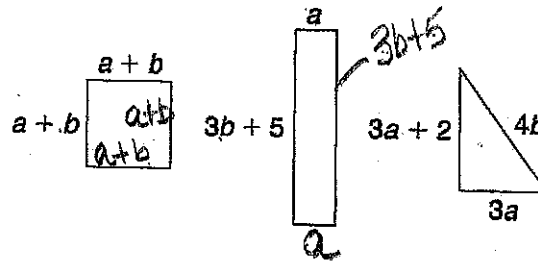
$$\underline{14a + 2b + 4}$$

22. Write and simplify an expression for the perimeter of the figure to the right.



$$\underline{6x + 7y + 5}$$

23. Write an expression to find the combined perimeters of the figures to the right. Then simplify the expression.

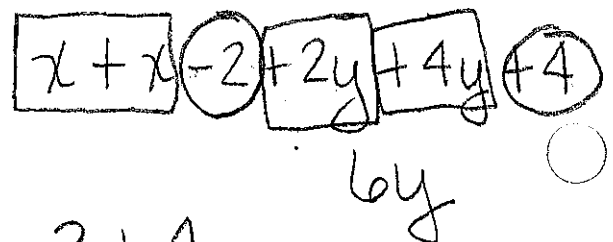


$$\underline{12a + 14b + 12}$$

24. Jake scored x points in the first basketball game. He scored 2 fewer points in the next game. His teammate, Jack, scored $2y$ points in the first game and 4 more than twice as many points in the next game. Write and simplify an expression for the total number of points scored by both players.

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

$$\underline{6y + 2x + 2}$$



$$\begin{aligned} & -2 + 4 \\ & 4 - 2 \end{aligned}$$