

READY, SET, GO!

Name _____

Period _____

Date _____

READY

Topic: Distributive Property

Simplify. First use the distributive property and then combine the like terms.

Example:

$$3x(4x + 1) + 2(4x + 1) \rightarrow (12x^2 + 3x) + (8x + 2) \rightarrow 12x^2 + \underbrace{[3x + 8x]}_{\text{like terms}} + 2 \rightarrow \underbrace{12x^2 + 11x + 2}_{\text{Simplified form}}$$

1. $2x(5x + 3) + 7(5x + 3)$

2. $8x(x + 1) + 2(x + 1)$

3. $6x(x - 10) - 1(x - 10)$

4. $1x(3x + 4) + 5(3x + 4)$

5. $3x(8x + 3) - 4(8x + 3)$

6. $5x(2x + 6) + 2(2x + 6)$

7. $7x(-5x + 2) - 13(-5x + 2)$

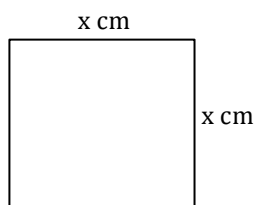
8. $-4x(12x + 3) + 3(12x + 3)$

SET

Topic: Comparing Area and perimeter

Calculate the area and perimeter of each figure below. The area may be written as a product. Include the correct unit on your answer. (Your answers will contain a variable.)

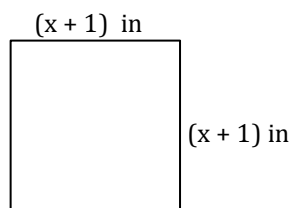
9.



a. Perimeter: _____

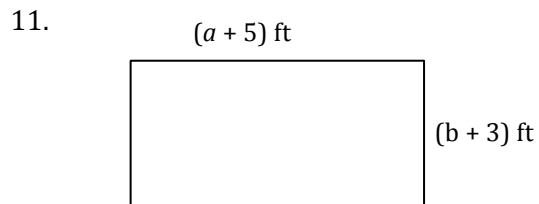
b. Area: _____

10.



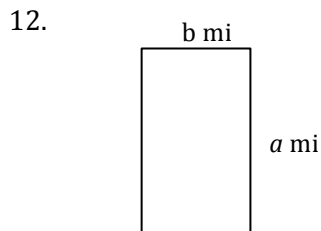
a. Perimeter: _____

b. Area: _____



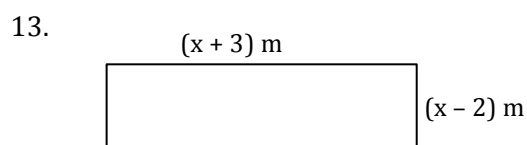
a. Perimeter: _____

b. Area: _____



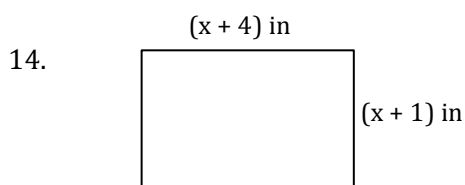
a. Perimeter: _____

b. Area: _____



a. Perimeter: _____

b. Area: _____



a. Perimeter: _____

b. Area: _____

15. Compare the perimeter to the area in each of problems (9-14).

In what way are the numbers and units in the perimeters and areas different?

GO

Topic: Greatest Common Factor

Find the GCF for the given terms.

16. $15abc^2$ and $25a^3bc$

17. $12x^5y$ and $32x^6y$

18. $17pqr$ and $51pqr^3$

19. $7x^2$ and $21x$

20. $6x^2$, $18x$, and -12

21. $4x^2$ and $9x$

22. $11x^2y^2$, $33x^2y$, and $3xy^2$

23. $16a^2b$, $24ab$, and $16b$

24. $49s^2t^2$ and $36s^2t^2$