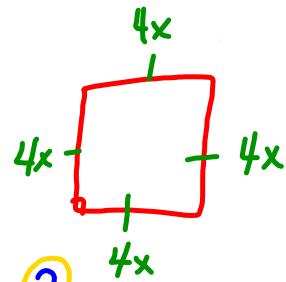


13. You are mowing a square lawn that has side lengths of  $4x$  yards. Write an expression in simplest form that represents the area of the lawn that you are mowing.

$$\text{lengths} = 4x$$

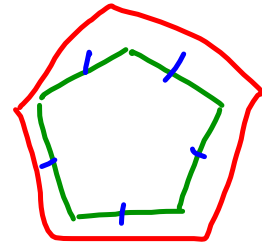


$$\text{Area} = (l)(w) = (4x)(4x) = 16x^2$$

$$\begin{aligned} \text{Area} &= (s)^2 = (4x)^2 \\ &= (4)^2(x)^2 \\ &= 16x^2 \end{aligned}$$

14. Each of the side lengths of a regular pentagon is  $(x + 4)$  centimeters. Write an equation in simplest form that represents the perimeter of the pentagon. When you triple  $x$ , does the perimeter of the pentagon triple? Explain.

$$\text{Lengths} = (x + 4) \text{ cm}$$



Perimeter is distance around  
found by adding

$$P = \{x + 4\} + \{x + 4\} + \{x + 4\} + \{x + 4\} + \{x + 4\}$$

$$5x + 20$$

15. Are the expressions  $6b^2 - 3c + 4b^2 + 4c$  and  $10b^2 + 5c - 4c$  equivalent? Explain your reasoning.

16. The expression  $\frac{5}{9}(F - 32)$  converts temperature from degrees Fahrenheit to degrees Celsius. What is the temperature in degrees Celsius when the temperature is  $105^{\circ}\text{F}$ ?

17. What does the expression  $28v + 15v + 5v$  represent in the data display? Find and interpret the value when  $v = 8$ .

