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.

length: $4x$ yd

$A = s^2$

$A = (4x)^2$

$= (4x)(4x)$

$= (4)^2(x^2)$

$A = 16x^2$

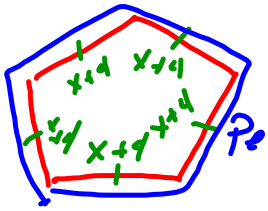
$A = (\ell)(w)$

$A = (4x)(4x)$

$A = 16x^2$

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.

Pentagon : 5 sides →



Perimeter

Perimeter $= (x+4) + (x+4) + (x+4) + (x+4) + (x+4)$

$= x+4+x+4+x+4+x+4$

$= 4x + 16$

Triple side $= 3x + 4$

$= 3x+4+3x+4+3x+4+3x+4$

$= 12x + 16$

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

$10b^2 + c$

$10b^2 + c$

Yes, Equivalent

Same sum of
Same two terms

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°F?

$\frac{5}{9}(F - 32)$ $F = 105$

$\frac{5}{9}(105 - 32)$

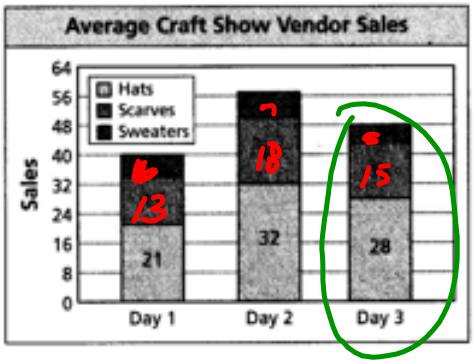
$\frac{5}{9}(73)$

$\frac{365}{9} = 40.5°$

$105 - 32 = 73$

$73 \times 5 = 365$

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



Day 3

$28v + 15v + 5v$

$48v$

$48(8)$

384