

Sec. 4.5 Writing a Function Rule

Problem 1: Carolyn has 420 CDs in her collection. Each month, she adds 12 more CDs to her collection. What equation is a function rule that represents this situation?

$$y = 420 + 12x$$

Problem 2: An archery club charges an annual membership fee of \$65 plus \$2 per visit. Write a function rule for the total cost of belonging to the club if you make v visits in a year. How much would it cost if you use the club 15 times in a year?

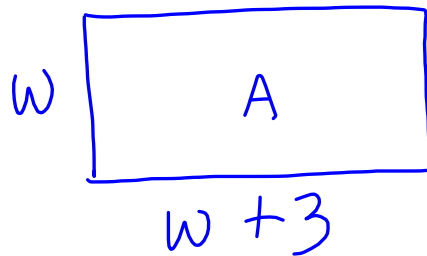
$$C = 65 + 2v$$

$$v = 15 \quad C = 65 + 2(15)$$

$$C = 65 + 30 = 95$$

$$\boxed{\$95}$$

Problem 3: Write a function rule for the area of a rectangle whose length is 3 in. more than the width. What is the area of the rectangle when its width is 7 in.?



$$A = w(w + 3) = w^2 + 3w$$