

Getting algebraic expression by identifying relations

Example 1 If the price of a movie ticket is \$5, express the price of n movie tickets.

Solution: If the price of a movie ticket is \$5, then the price for two movie tickets is 2 times \$5. Accordingly, the price for n movie tickets is n times \$5, or $5n$.

Example 2 Jason is 23 years old. Express his age 5 years ago, and express his age in n years.

Solution: 5 years ago, his age was $23 - 5 = 18$ years. In n years, his age will be $23 + n$. (We, of course, assume that n is in a reasonable range).

Example 3 There are x students enrolled in Dr. Garrison's Psychology 101 class. If $5/6$ of the class is present, represent the number of students in class.

Solution: The number will be $5/6$ of the number x , or $\frac{5x}{6}$.

Exercise 1: One can of tuna costs 75 cents. Express the cost of x cans of tuna. (Answer: $0.75x$ dollars).

Exercise 2: Jerome is x years old. Express his age in 5 years. (Answer: $x + 5$).

Exercise 3: R represents the total rainfall for the past four months. Represent the average rainfall for any month. (Answer: $R/4$).

Exercise 4: Greg got x points in his term paper. Express Marie's grade if she got 11 points more than Greg. (Answer: $x + 11$).