A company that manufactures toy dolls has a fixed cost of $10,000. It costs $75 to produce each doll. The total cost for the company is the sum of its fixed costs and variable costs. Write the total cost, $C$, as a function of the number of dolls produced.

**ANSWER:** Let $x$ be the number of dolls produced. Then $75x$ represents the variable cost (in dollars) of producing $x$ dolls. Since the company also has a fixed cost of $10,000, then the total cost is $C(x) = 10000 + 75x$. 