Southern New Hampshire University

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Applied Problems-Finding the Equation of a Linear Function

Recall:
Form of a Linear Function: $y = mx + b$
Independent Variable/Dependent Variable
x y

1. A company charting its profits notices that the relationship between the number of units sold, x, and the profits, P(x) is linear. If 200 units sold results in $3100 profit and 250 units sold results in $6000 profit, write a linear equation for the profit function, P(x).

2. A company has fixed costs of $3000 per month. If 50 units are produced the cost is $4350. If the relationship between units produced, x and the cost, C(x) is linear, write the linear equation of the cost function.