Practice with Multi-Step Word Problems

SNAPPY RENTAL CAR

Snappy Rental Car charges $108.25 to rent a car and $0.35 for every mile driven.

A.) How much would it cost to rent a car and drive it for a total of 17 miles?

B.) Write an equation that could be used to calculate the cost, C, of a rental as a function of total miles, m, driven in addition to the initial charge.

C.) If Jordi has a budget of $150, what is the maximum number of miles he can drive a rental car without going over?

$108.25 cost to rent
$0.35 x 17 miles = $5.95

$$108.25$$
$$- 5.95$$
$$114.20$$

$C=108.25+0.35m$

$150 > 108.25+0.35m$
$150 - 108.25 > 108.25 - 108.25 + 0.35m$
$41.75 > 0.35m$
$41.75 \div 0.35 > 0.35m \div 0.35$
$119.29 > m$
$m < 119.29$

119 miles:
$C=108.25+0.35m$
$C=108.25+0.35(119) = 149.90
UNDER!

120 miles:
$C=108.25+0.35m$
$C=108.25+0.35(120) = 150.25
OVER!

A) The total cost to rent a car and drive 17 miles would be $114.20.

B) $C = 108.25 + 0.35m$

C) Jordan could drive a maximum of 119 miles without going over his $150 budget.