

Exercise 5

Using Models Use the model given to answer the questions about the object or process being modeled.

The distance d (in mi) driven by a car traveling at a speed of v miles per hour for t hours is given by

$$d = vt$$

If the car is driven at 70 mi/h for 3.5 h, how far has it traveled?

Solution

Plug in $v = 70$ mi/h and $t = 3.5$ h into the formula.

$$d = \left(70 \frac{\text{mi}}{\text{h}}\right) (3.5 \text{ h}) = 245 \text{ mi}$$

After travelling for 3.5 h at 70 mi/h, the total distance travelled is 245 mi.