Task:

The speed of light in a vacuum is 2.998 × 108 m/s. What is its speed in miles per minute (mi/min)?

Solution:

To convert m/s to mi/min we have to find conversion factor first
1 mile = 1609.344 m
1m = 1/1609.344 miles
1 min = 60 s
1s = 1/60 min

Let's put mi/min instead of m/s according to equations above
m/s = [1/1609.344 miles] / [1/60 min]

The conversion factor is
f = 60 / 1609.344

Now we can convert m/s to mi/min

$V\ (mi/min) = 2.998 \cdot 10^8\ m/s \cdot f = 2.998 \cdot 10^8 \cdot (60 / 1609.344) = 1.118 \cdot 10^7\ mi/min$

Answer: $V = 1.118 \cdot 10^7\ mi/min$