

MATC9 Ch01.2 Key Concepts 2 Calculation and Rounding Worked Example

Example: A high pressure fuel pump delivers 140 litres of fuel every minute. How long will it take to fill the tanks of a business jet, which hold 800 litres?

Solution: Since accuracy is required, divide first, and then round.

$$\begin{aligned}\text{Time} &= \frac{800}{140} \\ &= 5.71 \text{ min}\end{aligned}$$

It takes about 6 minutes to fill the tanks.

Practice:

1. Freddie has an orchard with 370 apple trees. It takes 2.5 litres of spray to protect each tree from pests. How many litres of spray does he need for the orchard, to the nearest hundred?
2. Miranda bought 115 boxes of her favourite breakfast cereal at a store closing sale. She eats 0.25 box each day. How long will the 125 boxes last, to the nearest 100 days?

Answers: 1. 900 2. 500.