

Complete the following unit conversions by filling in the missing value:

a) $\frac{\text{inches}}{1 \text{ foot}}$

b) $\frac{\text{feet}}{1 \text{ mile}}$

c) $\frac{\text{feet}}{1 \text{ yard}}$

d) $\frac{\text{centimeters}}{1 \text{ inch}}$

e) $\frac{\text{sec}}{1 \text{ min}}$

f) $\frac{\text{min}}{1 \text{ hour}}$

Convert the following quantities. Use the example below as a guide to help you complete the others.

Example: 30,240 minutes into weeks

$$30,240 \text{ min} \cdot \frac{1 \text{ hour}}{60 \text{ min}} \cdot \frac{1 \text{ day}}{24 \text{ hours}} \cdot \frac{1 \text{ week}}{7 \text{ days}} = 3 \text{ weeks}$$

1. 1 hour into seconds

2. 432,000 seconds into days

3. 17 years into minutes

4. 43 miles into feet

5. 31,680 inches into miles

6. 2678 centimeters into feet

7. 1100 feet per second into miles per hour

Start with $\frac{1100 \text{ feet}}{1 \text{ sec}}$.

8. 53 yards per hour into inches per week

Start with $\frac{53 \text{ yards}}{1 \text{ hour}}$.

9. 88 inches per second into miles per day

10. 254 centimeters per day into miles per second