

You need to be practiced at performing unit conversions in the field. Jotting your unit cancellation table on paper, the back of an envelope, or whatever else might be available will help you be sure you are keeping the units straight. Problem solving in units that are familiar to fire staff is crucial to sound planning. Making a mistake with units can be very costly.

Use what you know about units to check your result. You know a chain is larger than a foot. Converting from feet to chains should therefore give you a smaller number, because the end result will be in chains, and each chain contains multiple feet.

Here are some opportunities for you to practice unit conversions.

1. Ludka's crew has been out on the Marre Fire for 2 weeks and 2 days. How many hours have they been there?

- 768 hours
  - 384 hours
  - 216 hours
- Weeks and days are different units and do not compute to hours.

Select the correct answer.

2. Ned fills a backpack pump with 5 gallons of water. How much weight in water has he added to his pack?

- 42 lbs
- 64 lbs
- 8.3 lbs
- 69 lbs

Select the correct answer.

3. A fire burns an area approximately 150 feet wide and 800 feet long. How many acres burned?

- 3 acres
- 69,034 acres
- $4.9 \times 10^9$  acres
- 26 acres

Select the correct answer.

4. Jane needs to fill a chain saw gas tank plus 4 sig bottles with a 33:1 gas/oil mix. A sig gas bottle holds 1 liter. The chain saw gas tank holds 1.2 pints. How much gas and how much oil will be mixed to fill the gas tank and four sig bottles?

- 8.25 pts gas, 0.25 pts oil
- 8.25 pts gas, 0.29 pts oil
- 9.38 pts gas, 0.28 pts oil
- 9.41 liters gas, 0.25 liters oil

Select the correct answer.

5. You have been told that a fire is expected to spread at a rate of 100 feet per minute. What is the rate of fire spread in miles per hour?

- 8.1 mph
- 4.5 mph
- 0.45 mph

1.1 mph

Select the correct answer.