

Lesson 3-10 • Group 2

Reinforce Understanding

3.10 Small Group • Group 2

I can convert measurement units using ratios and conversion factors, explain why the method works, and use it on a problem I have not seen before.

Worked model

The cabinet is 5 feet tall. I want to know how many inches that is.

1. My conversion factor is 1 foot = 12 inches.
2. Inches are smaller than feet, so I multiply: $5 \times 12 = 60$.
3. So 5 feet = 60 inches.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Match each measurement to its equivalent value.

Write the letter of the matching item on each line.

1. _____ 3 yards
2. _____ 4 feet
3. _____ 5 pounds
4. _____ 2 yards
5. _____ 36 inches
6. _____ 3 pounds

- A9 feet
- B48 inches
- C80 ounces
- D72 inches
- E3 feet
- F48 ounces

2. An arcade cabinet has parts measured in different units. Convert each to the target unit.

Complete the table. Show how you found each value.

Part	Measurement	Target Unit	Converted
Power cord	2 yards	inches	
Top panel	54 inches	feet	
Weight	96 ounces	pounds	
Side rail	5 feet	inches	

Show your work
