Customary Unit Conversions

Grade 4 – 6 math · measurement

Name: Date: Score: / 26

The ones you have to learn

Customary units — inches, pounds, gallons — were not designed as a system. They grew out of everyday objects and trade, so the numbers between them have no pattern: twelve inches to a foot, sixteen ounces to a pound, 5280 feet to a mile.

That means there is no ladder and no decimal point to shift. These conversions get memorised, and then the arithmetic is done properly.

One part does have a pattern worth noticing. Capacity **doubles** all the way up: two cups to a pint, two pints to a quart, and then four quarts to the gallon. So a gallon is sixteen cups, and a student who sees the doubling does not need to memorise that separately.

The conversions

- Length: **1 ft = 12 in**, **1 yd = 3 ft**, **1 mi = 5280 ft**.
- Weight: **1 lb = 16 oz**, **1 ton = 2000 lb**.
- Capacity: **1 c = 8 fl oz**, **1 pt = 2 c**, **1 qt = 2 pt**, **1 gal = 4 qt**.
- Capacity doubles all the way up: **cup, pint, quart**, then four quarts to the gallon.
- These are **not** powers of ten, so you multiply and divide properly — moving the decimal point will not work.
- The direction rule is unchanged: smaller unit means a **bigger** number.

Part A — Convert (12 marks)

3 feet → _____ **inches**	**48 inches →** _____ **feet**
2 yards → _____ **feet**	**5 pounds →** _____ **ounces**
32 ounces → _____ **pounds**	**3 gallons →** _____ **quarts**
6 pints → _____ **cups**	**24 fl oz →** _____ **cups**
2 miles → _____ **feet**	**9 feet →** _____ **yards**
4000 pounds → _____ **tons**	**8 quarts →** _____ **gallons**

Part B — Climb the capacity ladder (6 marks)

Convert	Answer
2 gallons into quarts	
2 gallons into pints	

2 gallons into cups	

> Each one builds on the one above it.

Part C — Word problems show your working (8 marks)

1. A recipe needs 3 cups of milk. How many fluid ounces is that?

2. A board is 7 feet long. How many inches is that?

3. A bag of sand weighs 48 ounces. How many pounds is that?

4. A jug holds 1 gallon. How many cups can be poured from it?

Customary Unit Conversions — Answer Key

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Part A — Convert

1. 3 feet → **36 inches**
2. 48 inches → **4 feet**
3. 2 yards → **6 feet**
4. 5 pounds → **80 ounces**
5. 32 ounces → **2 pounds**
6. 3 gallons → **12 quarts**
7. 6 pints → **12 cups**
8. 24 fl oz → **3 cups**
9. 2 miles → **10 560 feet**
10. 9 feet → **3 yards**
11. 4000 pounds → **2 tons**
12. 8 quarts → **2 gallons**

Part B — Climb the capacity ladder

1. 2 gallons into quarts → **8 quarts**
2. 2 gallons into pints → **16 pints**
3. 2 gallons into cups → **32 cups**

> Each step doubles, so the numbers go 8, 16, 32.

Part C — Word problems

1. **24 fl oz**
   3 × 8 = 24.
2. **84 inches**
   7 × 12 = 84.
3. **3 pounds**
   48 ÷ 16 = 3.
4. **16 cups**
   1 gal = 4 qt = 8 pt = 16 c. Each step doubles.