

Capacity word problems (mixed units)

Grade 5 Word Problems Worksheet

Hint: 16 ounces = 2 cups = 1 pint

2 pints = 1 quart

4 quarts = 1 gallon

1. Before a party, Ashley bought a tray of 24 water bottles; each bottle has a capacity of 12 oz. There are 30 guests. If each guest drinks 1 cup of water, is there enough water for all the guests?

2. Josh mixed 2 cartons of orange juice, 3 bottles of soda water and 6 cans of cocktail fruits to make a fruit punch for the Christmas party. Each carton of juice is 1 gallon and 3 quarts. Each soda water bottle contains 6 quarts. The cans of cocktail fruit are 2 pints each. How much (measured in gallons) of fruit punch did Josh make?

3. Emily made a pot of cream of pumpkin soup for thanksgiving dinner. She put 5 cups of cream in the soup. She poured the soup into 24 small soup bowls. How much cream (measured in oz) is used for each small bowl of soup?



4. There are two pitchers of lemonade in the fridge. There are 1.5 gallons of lemonade in one pitcher and 9 quarts of lemonade in the other pitcher. How many cups of lemonade are there in the fridge?
5. A person is supposed to drink half a gallon of water everyday. Abby drank 15 small cups of water today. If the capacity of the cup is 3.5 oz, how much more water does Abby need to drink today?
6. At a grocery store, tasting cups are used to let customers try a new brand of chicken stock. An ounce of chicken stock can fill up 5 tasting cups. Each carton of chicken stock is 16 oz. If 5,630 customers tried the chicken stocks in a day, they drank about _____ cartons of chicken stock.
- 70
 - 110
 - 350

Answers

1. $24 \times 12 = 288$
Ashley bought 288 oz of water.
 $30 \text{ cups} = 240 \text{ oz}$
The guest will be drink 240 oz in total.
There is enough water for all the guests.
2. $1 \text{ carton} = 1 \text{ g} + 3 \text{ qt} = 7 \text{ qt} = 14 \text{ pints}$
 $1 \text{ bottle} = 6 \text{ qt} = 12 \text{ pints}$
 $1 \text{ can} = 2 \text{ pints}$
 $2 \text{ cartons} + 3 \text{ bottles} + 6 \text{ cans} = 2(14) + 3(12) + 6(2) = 76 \text{ pints} = 9.5 \text{ gallons}$
Josh made 9.5 gallons of fruit punch.
3. $5 \times 8 \text{ oz} = 40 \text{ oz}$
 $40 \div 24 = \frac{5}{3} = 1\frac{2}{3}$
 $1\frac{2}{3}$ oz of cream is used for each small bowl of soup.
4. $1.5 \text{ gallon} = 6 \text{ quarts} = 12 \text{ pints} = 24 \text{ cups}$
 $9 \text{ quarts} = 18 \text{ pints} = 36 \text{ cups}$
 $24 + 36 = 60$
There are 60 cups of lemonade in the fridge.
5. $0.5 \text{ gallon} = 64 \text{ oz}$
 $15 \times 3.5 = 52.5 \text{ oz}$
 $64 - 52.5 = 11.5 \text{ oz}$
Abby needs to drink 11.5 oz more water.
6. $5,630 \div 5 = 1,126 \text{ oz of soup tasted.}$
 $1,126 \div 16 = 70.3 \text{ cartons}$
Answer is (a).