

Capacity word problems (customary units)

Grade 5 Word Problems Worksheet

Hint: 16 ounces = 2 cups = 1 pint

2 pints = 1 quarts

4 quarts = 1 gallon

1. Each day, Mommy Richelle prepared 4 servings of milk in her baby's bottles. Each serving she prepared had 8 oz of milk formula in it. How many pints of milk would she use to prepare for 7 days?
2. Elaine did not notice that there was a leak in the 5-gallon aquarium in her house. She saw that 3 quarts of water had leaked from the aquarium onto the floor, so she fixed it and put another 6 pints of water in it. How much water was left in the aquarium before refilling? How much water was in the aquarium after refilling? Express your answers in quarts.
3. Jean is making perfumes to be sold. She used 8 oz of alcohol, 2 oz of essential oil, 2 oz of distilled water and 0.5 oz of flower extracts to make one spray bottle of perfume. She received an order for 5 spray bottles of perfume which must be delivered within 5 days. In ounces, how much perfume does she need to make?



4. Rui saved 50 gallons of rainwater in a rain barrel. He used some of it to clean his car and another 25 quarts of water for indoor plants. After that, there were 23 gallons and 2 quarts of water left in the barrel. How much rainwater was used in cleaning his car? Express your answers in quarts?

5. Selena had 2 boxes each containing 10 pineapple juice bottles and each bottle contained 15 oz of juice. She put it all in a big jar to be shared with her 20 visitors. If she will be serving 2 cups of juice per visitor, is there enough juice for all of her visitors?

6. There are 20 full barrels of wine stocked in the cellar. Each barrel contains 30 gallons of wine. The owner sold the wine by bottles, each with the capacity of 40 ounces of wine. There will be about ____ bottles of wine produced.
 - a. 1,000
 - b. 2,000
 - c. 3,000

Answers

1. $4 \times 8 \times 7 = 224$ oz
 $224 \text{ oz} = 14$ pints
To prepare for 17 days, she would use 14 pints of milk.
2. $5 \text{ gallons} = 20$ quarts
 $20 - 3 = 17$
There were 17 quarts of water left in the aquarium before refilling.
 $6 \text{ pints} = 3$ quarts
 $17 + 3 = 20$ quarts
There were 20 quarts of water in the aquarium after refilling.
3. $8 + 2 + 2 + 0.5 = 12.5$
 $12.5 \times 5 = 62.5$
She needs to make 62.5 oz of perfume.
4. $50 \text{ gallons} = 200$ quarts
 $23 \text{ gallons and } 2 \text{ quarts} = 92 + 2 = 94$ quarts
 $200 - 94 - 25 = 81$
He used 81 quarts of rainwater in cleaning his car.
5. $2 \times 10 \times 15 = 300$ oz available juice
 $2 \text{ cups} = 16$ oz
 $16 \times 20 = 320$ oz juice needed for the visitors
 $300 < 320$
No. There is not enough juice for all of visitors.
6. $20 \times 30 = 600$ gallons
 $600 \text{ gallons} = 92,233$ ounces
 $92,233 \div 50 = 2,305.82$ bottles of wine
Answer is (b).