

Unit 6: More Decimal and Fraction Operations

ADVANCED · SET 3

Name: _____ Date: _____

Show your work on scrap paper. Write each answer in lowest terms, and include the unit only if the question asks for it.

1. A costume shop has a roll of gold ribbon 12.5 m long. Each cape needs a piece 45 cm long. The shop cuts as many full pieces as it can. How many centimeters of ribbon are left over?

Answer: _____

3. Ms. Ortiz measured 10 pencils. Two were $4\frac{1}{2}$ inches long, three were $4\frac{3}{4}$ inches long, four were $5\frac{1}{4}$ inches long, and one was $5\frac{1}{2}$ inches long. What is the total length of all 10 pencils, in inches?

Answer: _____

5. Dev pours $\frac{3}{4}$ of a liter of mango juice equally into 6 small cups. How many milliliters of juice are in each cup? (1 liter = 1,000 milliliters)

Answer: _____

7. A skate ramp is built from three boards laid end to end. The first is $2\frac{1}{2}$ feet long, the second is 18 inches long, and the third is $\frac{3}{4}$ of a yard long. What is the total length of the ramp, in inches?

Answer: _____

9. A post office weighed 8 letters. Three weighed $\frac{1}{2}$ ounce each, two weighed $\frac{3}{4}$ ounce each, two weighed $1\frac{1}{4}$ ounces each, and one weighed $1\frac{1}{2}$ ounces. What is the total weight of all 8 letters, in pounds? (1 pound = 16 ounces)

Answer: _____

2. In science class, 9 beakers hold these amounts of water, in liters: $\frac{1}{8}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{1}{2}$, and $\frac{5}{8}$. All the water is poured into one big jug, then shared equally back into the 9 beakers. How many liters are in each beaker now?

Answer: _____

4. Seven kids in running club ran these distances, in miles: $\frac{1}{4}$, $\frac{3}{8}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{7}{8}$, and 1. Add the three longest distances, then subtract the sum of the three shortest distances. What is the result, in miles?

Answer: _____

6. A baker has 4.5 kg of flour. Each loaf of bread uses 0.35 kg. She bakes as many whole loaves as she can. How many grams of flour are left over? (1 kg = 1,000 g)

Answer: _____

8. A hiking trail is $3\frac{3}{4}$ miles long. Maya walks $\frac{2}{5}$ of the whole trail before lunch. How many feet does she walk before lunch? (1 mile = 5,280 feet)

Answer: _____

10. An aquarium holds $5\frac{1}{8}$ gallons of water. Leo drains out $2\frac{3}{4}$ gallons, then pours in $1\frac{1}{2}$ quarts. How many quarts of water are in the aquarium now? (1 gallon = 4 quarts)

Answer: _____

11. Six identical bricks together weigh 9.6 kg. A garden cart can safely carry up to 25 kg. Can the cart safely carry 15 of these bricks? Answer yes or no.

Answer: _____

12. A $\frac{7}{8}$ -meter length of gift ribbon is cut into 5 equal pieces. How many centimeters long is each piece? (1 meter = 100 centimeters)

Answer: _____