

Unit 6: More Decimal and Fraction Operations

ADVANCED • SET 4

Name: _____

Date: _____

Solve each problem. Show your work on scratch paper and write only the final exact answer (include units where asked).

1. Nadia fills a cooler with $3\frac{1}{2}$ gallons of lemonade. She pours out 5 quarts for the soccer team, then 6 cups for the coaches. How many cups of lemonade are left in the cooler? (1 gallon = 4 quarts, 1 quart = 4 cups)

Answer: _____

3. Omar has a ribbon that is $\frac{2}{3}$ of a meter long. He cuts it into 4 equal pieces. How long is each piece in centimeters? (1 meter = 100 centimeters)

Answer: _____

5. Priya ran $9\frac{3}{8}$ miles over three days. She ran $2\frac{5}{6}$ miles on Monday and $3\frac{1}{4}$ miles on Tuesday. How many miles did she run on Wednesday?

Answer: _____

7. A weather club recorded rainfall on 12 rainy days and made a line plot. The data was: $\frac{1}{8}$ inch (3 days), $\frac{1}{4}$ inch (5 days), $\frac{1}{2}$ inch (2 days), $\frac{3}{4}$ inch (1 day), $1\frac{1}{8}$ inches (1 day). What was the total rainfall for the 12 days?

Answer: _____

2. A science class measured 12 earthworms and made a line plot. The data was: $\frac{1}{2}$ inch (3 worms), $\frac{3}{4}$ inch (2 worms), 1 inch (4 worms), $1\frac{1}{4}$ inches (2 worms), $1\frac{1}{2}$ inches (1 worm). If the total length of all 12 worms were shared out equally so every worm were the same length, how long would each worm be?

Answer: _____

4. A cracked water tank drips 0.35 liters every hour. How many milliliters drip out in 7.5 hours? (1 liter = 1000 milliliters)

Answer: _____

6. A bag holds $3\frac{3}{4}$ pounds of birdseed. A park worker uses $\frac{2}{5}$ of the birdseed, then pours the rest equally into 8 feeders. How many ounces of birdseed go into each feeder? (1 pound = 16 ounces)

Answer: _____

8. A deli has a 2.4 kilogram block of cheese. It is cut into equal pieces that each weigh 0.15 kilograms. Each piece sells for \$1.75. How much money does the deli make if every piece sells?

Answer: _____

9. A band rehearsal lasts $2\frac{1}{2}$ hours. The band spends $\frac{3}{10}$ of the time warming up, then splits the remaining time equally among 3 songs. How many minutes do they spend on each song?

Answer: _____

11. A box holds $2\frac{1}{4}$ pounds of trail mix. Leo scoops out 3 servings of 5 ounces each and 2 servings of 7 ounces each. Did the box have enough trail mix?

Answer yes or no. (1 pound = 16 ounces)

Answer: _____

10. A garden bed is $4\frac{2}{5}$ meters long and $2\frac{1}{2}$ meters wide. Gardeners spread $\frac{1}{4}$ kilogram of fertilizer on every square meter. How many kilograms of fertilizer do they need for the whole bed?

Answer: _____

12. A carpenter has a board that is $7\frac{1}{2}$ feet long. She cuts it into pieces that are each $\frac{1}{2}$ yard long. How many pieces does she get? (1 yard = 3 feet)

Answer: _____