

Fraction and Decimal Word Problems

Grades 5–6 • Mixed Fractions and Decimals

Directions

Read each problem carefully. Some problems include both fractions and decimals. Convert as needed, show all work, and write your final answer in decimal form.

1. Baking Sugar

A recipe calls for 0.5 cups of sugar. Another recipe uses $\frac{1}{4}$ cup of sugar. How many cups of sugar are needed in total?

2. Running Distance

Liam ran 1.2 miles in the morning and $\frac{3}{4}$ mile in the afternoon. How many miles did he run altogether?

3. Notebook Cost

A notebook costs \$1.75. A pencil costs $\frac{1}{4}$ of a dollar. How much do both items cost together?

4. Ribbon Length

A ribbon is 2.5 meters long. Another piece of ribbon is $\frac{1}{2}$ meter long. What is the total length of the ribbon?

5. Water Bottle

A water bottle holds 0.75 liters of water. Emma drinks $\frac{1}{4}$ liter. How much water remains in the bottle?

6. Classroom Supplies

A classroom has 2.6 boxes of crayons. Another $\frac{3}{5}$ of a box is added. How many boxes of crayons are there in total?

7. Garden Path

A garden path is 4.8 meters long. A flower bed takes up $\frac{3}{4}$ meter of that length. How much of the path is not covered by the flower bed?

8. Movie Night Snacks

A bag of popcorn weighs 1.25 pounds. Another bag weighs $\frac{3}{4}$ pound. What is the total weight of the two bags?

9. Jogging Trail

A jogging trail is 6.5 kilometers long. A runner completes $2 \frac{1}{4}$ kilometers before stopping. How many kilometers does the runner have left to complete?

10. School Fundraiser

A school fundraiser collected \$4.80 in the morning. In the afternoon, the class collected another $\frac{2}{5}$ of a dollar. What was the total amount collected that day?

Answer Key

Step-by-step solutions

Solutions

1. $\frac{1}{4} = 0.25$. $0.5 + 0.25 = 0.75$ cups.
2. $\frac{3}{4} = 0.75$. $1.2 + 0.75 = 1.95$ miles.
3. $\frac{1}{4}$ dollar = \$0.25. $\$1.75 + \$0.25 = \$2.00$.
4. $\frac{1}{2} = 0.5$. $2.5 + 0.5 = 3.0$ meters.
5. $\frac{1}{4} = 0.25$. $0.75 - 0.25 = 0.50$ liters remain.
6. $\frac{3}{5} = 0.6$. $2.6 + 0.6 = 3.2$ boxes.
7. $\frac{3}{4} = 0.75$. $4.8 - 0.75 = 4.05$ meters.
8. $\frac{3}{4} = 0.75$. $1.25 + 0.75 = 2.0$ pounds.
9. $2\frac{1}{4} = 2.25$. $6.5 - 2.25 = 4.25$ kilometers.
10. $\frac{2}{5} = 0.4$. $\$4.80 + \$0.40 = \$5.20$.