

Unit 3: Multiplying and Dividing Fractions

ADVANCED · SET 3

Name: _____

Date: _____

Solve each problem. Show your work on scratch paper and write each answer as a whole number or a fraction in simplest form.

1. A crafter has a ribbon that is $\frac{4}{5}$ of a meter long. She cuts off $\frac{5}{8}$ of the ribbon, then uses $\frac{3}{4}$ of that cut piece on a kite. How many meters of ribbon did she use on the kite?

Answer: _____

3. Half a kilogram ($\frac{1}{2}$ kg) of clay is shared equally among 6 students. Each student uses $\frac{2}{3}$ of their share to make a bowl. How many kilograms of clay does one student use for the bowl?

Answer: _____

5. Compute $\frac{2}{3} \times \frac{9}{10} \times \frac{5}{7}$. Write the answer in simplest form.

Answer: _____

7. Fill in the missing factor: $\frac{4}{9} \times \underline{\hspace{1cm}} = \frac{8}{27}$. Write the missing fraction in simplest form.

Answer: _____

9. A garden bed is $\frac{7}{8}$ of a meter long and $\frac{4}{5}$ of a meter wide. Exactly $\frac{5}{7}$ of the bed is planted with mint. How many square meters of mint are there?

Answer: _____

2. A 9-meter rope is cut into pieces that are each $\frac{1}{4}$ meter long. Then every piece is cut exactly in half. How many small pieces are there in the end?

Answer: _____

4. Is $\frac{5}{6} \times \frac{7}{8}$ greater than $\frac{3}{4}$? Answer yes or no.

Answer: _____

6. A tailor has 24 meters of fabric. Each doll's scarf uses $\frac{1}{12}$ of a meter. How many scarves can the tailor make?

Answer: _____

8. A full batch of granola needs $\frac{2}{3}$ cup of oats. Mia makes only $\frac{3}{4}$ of a batch, then splits the oats she used equally into 4 small bags. How many cups of oats are in one bag?

Answer: _____

10. A beekeeper pours $\frac{1}{4}$ of a kilogram of honey equally into 10 jars. She sells 3 of the jars. How many kilograms of honey did she sell?

Answer: _____

11. A juice machine holds 8 liters. It fills bottles that each hold $\frac{1}{6}$ of a liter. The full bottles are packed into boxes of 5. How many boxes get completely filled?

Answer: _____

12. A rain barrel holds 25 liters when full. It is $\frac{3}{5}$ full. All of that water is poured into watering cans that each hold $\frac{1}{2}$ liter. How many watering cans are filled?

Answer: _____