

Grade 5 Math Word Problems Worksheet

Read and answer each question. Show your work!

Multiplying Fractions Word Problems #1

1. A dime is $\frac{1}{2}$ inch wide. If you put 5 dimes end to end, how long would they be from beginning to end?

$$\begin{array}{l} 1 \text{ dime} \text{ --- } \frac{1}{2} \text{ inch} \\ 5 \text{ dimes} \text{ --- } ? \end{array} \Rightarrow \frac{5 \text{ dimes} \times \frac{1}{2} \text{ inch}}{1 \text{ dime}} = \frac{5}{2} = 2.5 \text{ inches}$$

2. You have 10 cookies and want to give $\frac{1}{2}$ of them to a friend. How many do you give to your friend?

$$\begin{array}{l} 10 \text{ cookies} \text{ --- } 100\% \\ ? = \frac{(50\%)(10 \text{ cookies})}{(100\%)} = \frac{500}{100} \text{ cookies} = 5 \text{ cookies} \end{array} \quad \frac{1}{2} = 50\%$$

3. You have 8 donuts and you want to give $\frac{1}{4}$ of them to a friend. How many donuts would your friend get?

$$\begin{array}{l} 8 \text{ donuts} \text{ --- } 1 \text{ (the whole)} \\ ? \text{ --- } \frac{1}{4} \end{array} \quad ? = \frac{1}{4} \times 8 = \frac{8}{4} = 2 \text{ donuts}$$

4. You have 6 donuts and you want to give $\frac{2}{3}$ of them to a friend and keep the rest for yourself. How many donuts would your friend get?

$$\begin{array}{l} 6 \text{ donuts} \text{ --- } 1 \\ \times \text{ --- } \frac{2}{3} \end{array} \quad \frac{2}{3} \times 6 = \frac{2 \times 6}{1 \times 3} = \frac{12}{3} = 4 \text{ to friends}$$

5. Five friends buy a package of 12 cookies and want to share them equally. Each friend will get $\frac{1}{5}$ of the cookies. How much will each friend get?

$$\begin{array}{l} 12 \text{ cookies} \text{ --- } 1 \\ ? \text{ --- } \frac{1}{5} \end{array} \quad \begin{array}{l} \text{Since the } \frac{1}{5} \text{ is } 0.4, \\ \text{you want to give} \\ \text{2 cookies to each.} \\ \uparrow \end{array}$$

$$? = \frac{(12 \text{ cookies}) \left(\frac{1}{5}\right)}{1} = \frac{12 \times 1}{5} = \frac{12}{5} = 2.4$$

2 will be left

6. $\frac{3}{4}$ of a pan of brownies was sitting on the counter. You decided to eat $\frac{1}{3}$ of the brownies in the pan. How much of the whole pan of brownies did you eat?

$\frac{3}{4}$ sitting = $\frac{1}{4}$ eaten so $\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$

after. $\frac{1}{3}$ of $\frac{3}{4} = \frac{1}{3} \times \frac{3}{4} = \frac{3 \times 1}{3 \times 4} = \frac{3}{12} = \frac{1}{4}$ eaten Half!

7. You have $\frac{2}{3}$ of a pumpkin pie left over from Thanksgiving. You want to give $\frac{1}{2}$ of it to your sister. How much of the whole pumpkin pie will this be?

$\frac{2}{3}$ left over, give $\frac{1}{2}$ to sister

$$\frac{2}{3} \cdot \frac{1}{2} = \frac{2 \times 1}{2 \times 3} = \frac{2}{6} = \frac{1}{3}$$

\therefore your sister will get $\frac{1}{3}$ of the cake