Communication | Successful Partnership | Encouragement | Solving Problem Together | Collaboration

Part 1-9 Classwork

No Calculators

Solve.

Question 01

You are cutting sections of ribbon that are $\frac{1}{4}$ meters in length. You have a total of $3\frac{1}{2}$ meters of ribbon. How many sections can you make?

$$3\frac{1}{2} \div \frac{1}{4}$$

$$\frac{7}{2} \div \frac{1}{4}$$

$$\frac{7}{2} \times \frac{4}{1} = \frac{28}{2} \begin{array}{c} \div 2 \\ \div 2 \end{array} \quad \frac{14}{1} = \boxed{14}$$

Question 02

You have a total of $5\frac{1}{3}$ meters of ribbon. You are cutting sections of ribbon that are $\frac{2}{3}$ meters in length. How many sections can you make?

$$5\frac{1}{3} \div \frac{2}{3}$$

$$\frac{16}{3} \div \frac{2}{3}$$

$$\frac{16}{3} \times \frac{3}{2} = \frac{48}{6} \begin{array}{c} \div 2 \\ \div 2 \end{array} \quad \frac{24}{3} \begin{array}{c} \div 3 \\ \div 3 \end{array} \quad \frac{8}{1} = \boxed{8}$$

Question 03

Each serving of trail mix requires $\frac{1}{2}$ of a cup of almonds. You have a total of $5\frac{1}{2}$ cups of almonds. How many servings of trail mix can you make?

$$5\frac{1}{2} \div \frac{1}{2}$$

$$\frac{11}{2} \times \frac{2}{1} = \frac{22}{2} \begin{array}{c}\div 2\\\div 2\end{array} \qquad \frac{11}{1} = \boxed{11}$$

$$\frac{11}{2} \div \frac{1}{2}$$

Question 04

You have a total of $4\frac{1}{2}$ cups of raisins. Each serving of trail mix requires $\frac{1}{6}$ of a cup of raisins. How many servings can you make?

$$4\frac{1}{2} \div \frac{1}{6}$$

$$\frac{9}{2} \times \frac{6}{1} = \frac{54}{2} \begin{array}{c}\div 2\\\div 2\end{array} \qquad \frac{27}{1} = \boxed{27}$$

$$\frac{9}{2} \div \frac{1}{6}$$

Question 05

Each volunteer agreed to pick of litter from $\frac{2}{5}$ of a mile of a local hiking trail. The trail is $1\frac{3}{5}$ miles. How many volunteers are needed for the entire trail?

$$1\frac{3}{5} \div \frac{2}{5}$$

$$\frac{8}{5} \times \frac{5}{2} = \frac{40}{10} \begin{array}{c}\div 10\\\div 10\end{array} \qquad \frac{4}{1} = \boxed{4}$$

$$\frac{8}{5} \div \frac{2}{5}$$

Question 06

You have a total of $3\frac{1}{2}$ gallons of paint. Each classroom requires $\frac{1}{6}$ of a gallon of paint. How many classrooms can you paint?

$$3\frac{1}{2} \div \frac{1}{6}$$

$$\frac{7}{2} \div \frac{1}{6}$$

$$\frac{7}{2} \times \frac{6}{1} = \frac{42}{2} \begin{array}{c}\div 2\\\div 2\end{array} \qquad \frac{21}{1} = \boxed{21}$$