

Fractions Sample Problems

74. Read this story out loud:

Carmen got a box of chocolates for her birthday. She ate $\frac{4}{10}$ of the candies and gave $\frac{3}{10}$ of them to her sister.

When the fractions are read aloud as 4 tenths and 3 tenths, children think of them as things—like 4 apples and 3 apples.

Most of the difficulty that students at every grade level have with fractions is rooted in the abstraction of the symbols. When the symbols are read aloud, their names give them meaning.

- Who ate more candies, Carmen or her sister? Explain how you know this.
- The two girls, together, ate what fraction of the candies?
- What fraction of the candies were not eaten?
- Write the correct fractions to complete each sentence:

i. $\frac{\quad}{\text{fraction of candies that Carmen ate}} + \frac{\quad}{\text{fraction of candies that sister ate}} = \frac{\quad}{\text{fraction of candies that were eaten}}$

ii. $\frac{\quad}{\text{fraction of candies that were eaten}} + \frac{\quad}{\text{fraction of candies that were not eaten}} = \frac{\quad}{\text{fraction that represents number of candies in whole box}}$

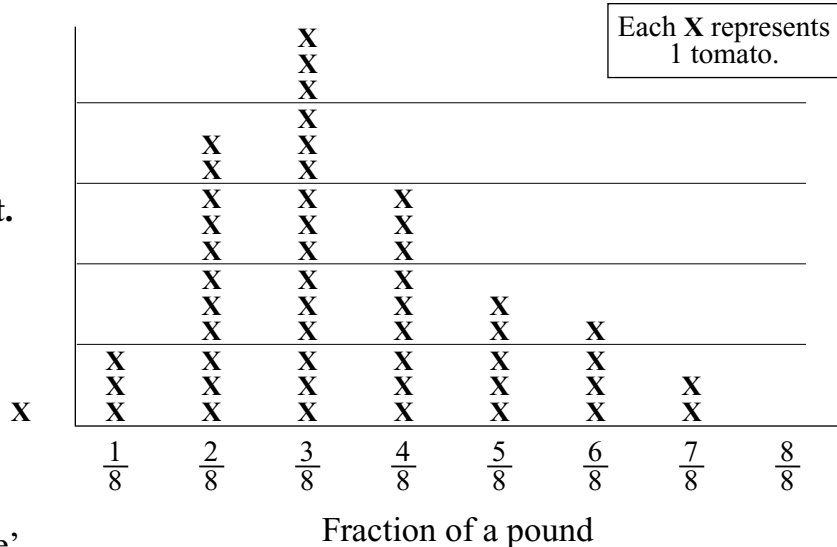
244. Angela has 3 gold charms. Each charm weighs $\frac{6}{10}$ of an ounce. Gold is worth \$100 per tenth-ounce.

- How much is each charm worth?
- What is the total weight of the 3 charms?
(Write your answer as a fraction: _____ ounce)
- Write a fraction to complete each equation:
 $\frac{6}{10} + \frac{6}{10} + \frac{6}{10} = \underline{\hspace{2cm}}$
 $3 \times \frac{6}{10} = \underline{\hspace{2cm}}$

116. This line plot displays information collected for a science project. It shows the weights of the tomatoes grown as part of the project.

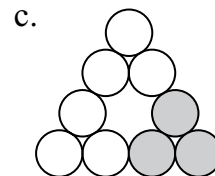
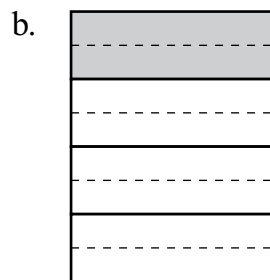
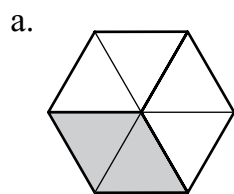
a. How many tomatoes are represented on the plot?

b. If you were asked, “What was the ‘average’ weight of the tomatoes in the project?”, what would you say? Explain how you got your answer.



There is no right or wrong answer. Let students talk about what average means to them in real world contexts.

136. Write 2 different fractions to represent the shaded part in each picture.



248. a. There are 112 players in the Mid-City soccer league. They belong to 8 equal-numbered teams.

How many players are on each team?

b. There are 112 candies in a bag, and $\frac{1}{8}$ of them are chocolates. How many chocolates are in the bag?

c. Complete this equation: $\frac{1}{8} \times 112 = \underline{\hspace{2cm}}$.

Talk with your class about what is the same about these three problems.