

Name	Date	/20

- 1. Every week Mary buys $6\frac{1}{2}$ kg of dog food. She uses $1\frac{1}{3}$ kg to feed her dog and she uses $1\frac{1}{2}$ kg to feed her neighbors dog.
 - a. How many kilograms of dog food does Mary have left? Write one or more equations to show how you reached your answer.

- b. Mary wants to buy enough dog food to feed her dog 2 more weeks and the neighbors dog one more week.
 - She will use the same amounts of dog food as as before. How much dog food will she need? Does she have enough left to do so? Explain your answer using words, pictures, or numbers.

- 2. Mary feeds the neighbors dog while they are on vacation for a week.
 - a. She feeds the dog a weekly total of $\frac{3}{5}$ kg less food in the morning than in the afternoon. If Mary feeds the dog a weekly total of $1\frac{1}{4}$ kg in the morning, how many kilograms of dog food does she feed the neighbors dog in the afternoon for the week? Explain your answer using words, pictures, or equations.

b. Mary also feeds her dog. She had $4\frac{6}{10}$ kg of dog food for her dog for the week, but 1.2 kg was left at the end of the week. How many kilograms did she feed her dog? Write an equation that shows how you reached your answer.

c. Did Mary feed more kilograms of food to her dog or her neighbors dog? How many more kilograms? Explain your answer using an equation.

Common Core Standards: 5.NF.1, 5.NF.2

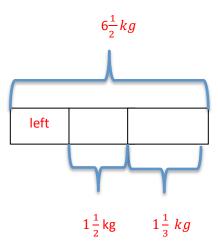
Answer Key

- 1. Every week Mary buys $6\frac{1}{2}$ kg of dog food. She uses $1\frac{1}{3}$ kg to feed her dog and she uses $1\frac{1}{2}$ kg to feed her neighbors dog.
- a. How many kilograms of dog food does Mary have left? Write one or more equations to show how you reached your answer.

(4pts= correctly answers using part whole thinking, 3pts= correctly answers but doesn't show equation or small calculation error with part whole reasoning, 2 pts= incorrect answer and difficulty setting up the problem, 1pt = incorrect answer with no evidence of concept. (5.NF.1, 5.NF.2)

$$6\frac{1}{2} - 1\frac{1}{2} = 5$$

$$5 - 1\frac{1}{3} = 3\frac{2}{3}$$



Mary had $3\frac{2}{3}$ kg of dog food left over

- b. Mary wants to buy enough dog food to feed her dog 2 more weeks and the neighbors dog one more week.
- She will use the same amounts of dog food as as before. How much dog food will she need? Does she have enough left to do so? Explain your answer using words, pictures, or numbers.

(4pts= correctly calculates answer and gives equations with reasoning, 3pts= correctly answers first question but doesn't show equation or small calculation error with no reasoning, 2 pts= incorrect answer but with good thought, 1pt = incorrect answer with no evidence of concept. (5.NF.1, 5.NF.2)

$$1\frac{1}{3} + 1\frac{1}{3} = 2\frac{2}{3}$$

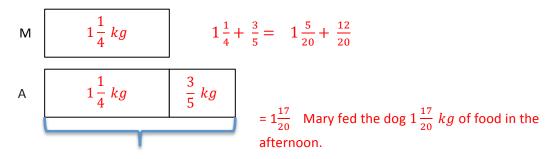
$$1\frac{1}{2} + 2\frac{2}{3} = 1\frac{3}{6} + 2\frac{4}{6}$$
$$= 4\frac{1}{6}$$

 $=4\frac{1}{6}$ Mary does not have enough dog food. $4\frac{1}{6} > 3\frac{2}{3}$

Common Core Standards: 5.NF.1, 5.NF.2

- 2. Mary feeds the neighbors dog while they are on vacation for a week.
- a. She feeds the dog a weekly total of $\frac{3}{5}$ kg less food in the morning than in the afternoon. If Mary feeds the dog a weekly total of $1\frac{1}{4}$ kg in the morning, how many kilograms of dog food does she feed the neighbors dog in the afternoon for the week? Explain your answer using words, pictures, or equations.

(4pts= correctly answers using part whole thinking, 3pts= correctly answers but doesn't show equation or small calculation error with part whole reasoning, 2 pts= incorrect answer and difficulty setting up the problem, 1pt = incorrect answer with no evidence of concept. (5.NF.1, 5.NF.2)



b. Mary also feeds her dog. She had $4\frac{6}{10}$ kg of dog food for her dog for the week, but 1.2 kg was left at the end of the week. How many kilograms of dog food did she feed her dog? Write an equation that shows how you reached your answer.

(4pts= correctly answers and explains, 3pts= correctly answers but doesn't show equation or doesn't explain, 2 pts= incorrect answer and difficulty setting up the problem, 1pt = incorrect answer with no evidence of concept. (5.NF.1, 5.NF.2)

$$4\frac{6}{10} - 1\frac{2}{10} = 3\frac{4}{10}$$
 = $3\frac{4}{10}kg \text{ or } 3\frac{2}{5}kg \text{ of dog food was left}$

c. Did Mary feed more kilograms of food to her dog or her neighbors dog? How many more kilograms? Explain your answer using an equation.

(4pts= correctly answers and explains, 3pts= correctly answers but doesn't show equation or doesn't explain, 2 pts= incorrect answer and difficulty setting up the problem, 1pt = incorrect answer with no evidence of concept. (5.NF.1, 5.NF.2)

Mary's Dog:
$$3\frac{4}{10}$$

Neighbors dog:
$$1\frac{17}{20} + 1\frac{1}{4} = 1\frac{17}{20} + 1\frac{5}{20} = 2\frac{22}{20}$$
 $3\frac{2}{20} = 3\frac{1}{10}$ $3\frac{4}{10} - 3\frac{1}{10} = \frac{3}{10}$

 $3\frac{4}{10}\ kg > 3\frac{1}{10}\ kg$ Mary fed her dog more than her neighbors. She fed her dog $\frac{3}{10}\ kg$ more than the neighbors dog.