1. Chase volunteers at an animal shelter after school, feeding and playing with the cats.

   a. If he can make 5 servings of cat food from a third of a kilogram of food, how much does one serving weigh?

   \[
   \frac{1}{3} \text{ kg} \div 5 = \frac{1}{3} \times \frac{1}{5} = \frac{1}{15} \text{ kg}
   \]

   One serving weighs \( \frac{1}{15} \text{ kg} \).

   b. If Chase wants to give this same serving size to each of 20 cats, how many kilograms of food will he need?

   \[
   \frac{1}{15} \times 20 = \frac{20}{15} = \frac{4}{3} = \frac{13}{15}
   \]

   Chase will need \( 1\frac{3}{15} \) kg of food.

2. Anouk has 4.75 pounds of meat. She uses a quarter pound of meat to make one hamburger.

   a. How many hamburgers can Anouk make with the meat she has?

   \[
   4\frac{3}{4} \div \frac{1}{4} = \frac{19}{4} \times 4 = 19
   \]

   She can make 19 quarter pound burgers.

   b. Sometimes Anouk makes sliders. Each slider is half as much meat as is used for a regular hamburger.

   How many sliders could Anouk make with the 4.75 pounds?

   \[
   19 \times 2 = 38
   \]

   She can make 38 sliders.
3. Ms. Geronimo has a $10 gift certificate to her local bakery.
   
   a. If she buys a slice of pie for $2.20 and uses the rest of the gift certificate to buy chocolate macaroons that cost $0.60 each, how many macaroons can Ms. Geronimo buy?
   
   \[
   \text{Pie:} \quad \text{Left:} \quad \begin{array}{c}
   \text{Pie} \\
   \text{Left} \\
   \end{array} \quad \begin{array}{c}
   \$7.80 \\
   \end{array} \\
   \text{? macaroons} \\
   \] 
   
   \[
   \text{\$7.80 - \$2.20 = \$5.60 left} \\
   \text{She can buy \(13\) macaroons} \\
   \]
   
   b. If she changes her mind and instead buys a loaf of bread for $4.60 and uses the rest to buy cookies that cost \(1 \frac{1}{2}\) times as much as the macaroons, how many cookies can she buy?
   
   \[
   \begin{align*}
   10.00 & - 4.60 = 5.40 \text{ left} \\
   0.60 \times \frac{1}{2} & = \frac{6}{10} \times \frac{3}{2} = \frac{18}{20} \times \frac{1}{10} = \frac{9}{10} = \$0.90 \text{ each cookie} \\
   \frac{54}{10} & \div \frac{9}{1} = \frac{54}{10} \times \frac{10}{9} = 6 \text{ cookies} \\
   \] 
   
4. Create a story context for the following expressions.
   
   a. \((5 \frac{1}{4} - 2 \frac{1}{8}) \div 4\)
   
   Lisa had 5\(\frac{3}{4}\) pounds of almonds. She used 2\(\frac{1}{2}\) pound in recipes. She divided the remaining almonds between 4 bags. How much is in each bag?
   
   b. \(4 \times (\frac{4}{8})\)
   
   John had $4.80. He divided it into groups of $0.80 each. Renee had 4 times as many groups as John. How many groups does Renee have?

5. Create a story context for the following tape diagram.
   
   I had a yarn 6 feet long. I only needed \(\frac{3}{4}\) of the length. Of the fourth, \(\frac{2}{3}\) were used for the bracelet. How many feet were used for the bracelet?