1. Mrs. Silverstein bought 3 mini cakes for a birthday party. She cuts each cake into quarters and plans to serve each guest 1 quarter of a cake. How many guests can she serve with all her cakes? Draw a picture to support your response.

\[ \text{cakes} \]

\[ \frac{3}{4} \times 3 = 12 \]

She can serve 12 guests.

2. Mr. Pham has \( \frac{1}{4} \) pan of lasagna left in the refrigerator. He wants to cut the lasagna into equal slices so he can have it for dinner for 3 nights. How much lasagna will he eat each night? Draw a picture to support your response.

\[ \text{lasagna} \]

\[ \frac{1}{4} \div 3 = \frac{1}{4} \times \frac{1}{3} = \frac{1}{12} \]

He can eat \( \frac{1}{12} \) of the lasagna each night for 3 nights.

3. The perimeter of a square is \( \frac{5}{4} \) meter.
   a. Find the length of each side in meters. Draw a picture to support your response.

\[ P = 4x \]

\[ \frac{5}{4} = 4x \]

Each side is \( \frac{1}{20} \) m.

b. How long is each side in centimeters?

\[ 1 \text{ m} = 100 \text{ cm} \]

\[ \frac{1}{20} \text{ m} = \frac{100 \text{ cm}}{20} = 5 \text{ cm} \]
4. A pallet holding 5 identical crates weighs \( \frac{1}{4} \) ton.
   a. How many tons does each crate weigh? Draw a picture to support your response.

   Each crate weighs \( \frac{1}{20} \) ton.

   \[
   \frac{1}{4} \div 5 = \frac{1}{4} \times \frac{1}{5} = \frac{1}{20}
   \]

   b. How many pounds does each crate weigh?

   \[
   \frac{1}{20} \text{ ton} = \frac{2000}{20} \text{ lb} = 100 \text{ lb}
   \]

5. Faye has 5 pieces of ribbon, each 1 yard long. She cuts each ribbon into sixths.
   a. How many sixths will she have after cutting all the ribbons?

   She has 30 sixths.

   b. How long will each of the sixths be in inches?

   Each sixth is \( \frac{1}{6} \) yd, which is 60 inches.

   \[
   1 \text{ yd} = 36 \text{ inches}
   \]

   \[
   \frac{1}{6} \text{ yd} = \frac{36}{6} \text{ in} = 60 \text{ in}
   \]
6. A glass pitcher is filled with water. $\frac{1}{8}$ of the water is poured equally into 2 glasses. 
   a. What fraction of the water is in each glass?

   \[ \frac{1}{8} \div 2 = \frac{1}{8} \times \frac{1}{2} = \frac{1}{16} \]

   $\frac{1}{16}$ of the water is poured into each glass.

   b. If each glass has 3 fluid ounces of water in it, how many fluid ounces of water were in the full pitcher?

   \[ \frac{1}{16} \times 3 \times \frac{48}{3} = \frac{48}{48} \text{ oz in the full pitcher.} \]

   c. If $\frac{1}{4}$ of the remaining water is poured out of the pitcher to water a plant, how many cups of water are left in the pitcher?

   \[ 6 \text{ cups} - \frac{6}{8} = \frac{48}{8} - \frac{6}{8} = \frac{42}{8} \text{ cups} \]

   \[ \frac{1}{4} \text{ of } \frac{42}{8} \text{ cups} \rightarrow \frac{1}{4} \times \frac{42}{8} = \frac{42}{32} = \frac{5}{16} \text{ cups to water plant} \]

   \[ \frac{42}{8} - \frac{42}{32} = \frac{108}{32} - \frac{42}{32} = \frac{126}{32} = 3 \frac{30}{32} = 3 \frac{15}{16} \text{ cups left} \]