Problem-Solving Strategy:
Draw a Picture

Draw a picture to solve each problem.

Kacey painted several pieces of pottery. One third of the pieces were plates, \(\frac{1}{6}\) of the pieces were bowls, and 10 of the pieces were cups. How many pieces of pottery did Kacey paint?

\[
\begin{align*}
\frac{1}{3} &= \frac{2}{6} \quad \text{of the pieces were plates} \\
\frac{2}{6} + \frac{1}{6} &= \frac{3}{6} \quad \text{of the pieces were plates or bowls} \\
\frac{6}{6} - \frac{3}{6} &= \frac{3}{6} \quad \text{of the pieces were cups}
\end{align*}
\]

Draw a picture using what you know.

\[
\begin{array}{c|c|c|c|c|c|c}
& \frac{1}{6} & \frac{1}{6} & \frac{1}{6} & \frac{1}{6} & \frac{1}{6} & \frac{1}{6} \\
\hline
\text{plates} & \frac{1}{6} \quad 1 \\
\text{bowls} & \frac{1}{6} \quad 1 \\
\text{cups} & \frac{1}{6} \quad 1 \\
\end{array}
\]

Cups make up half of the total pieces painted.

\[
\frac{1}{2} \quad \text{of the total pieces painted} = 10
\]

Kacey painted 20 pieces of pottery.

Problem Solving

1. Beth spent \(\frac{3}{8}\) of her money on guitar strings, \(\frac{1}{8}\) of her money on guitar picks, and $15 on a guitar tuner. How much money did Beth have before buying guitar accessories?

\[
\begin{align*}
\quad & \quad \frac{3}{8} \quad \text{guitar strings} \\
\quad & \quad \frac{1}{8} \quad \text{guitar picks} \\
\quad & \quad \$15 \quad \text{guitar tuner}
\end{align*}
\]

Show your work.

2. Rusty arranged ornaments by color. One fourth of the ornaments were green, \(\frac{3}{8}\) of the ornaments were yellow, and 24 of the ornaments were red. How many ornaments did Rusty arrange?

\[
\begin{align*}
\frac{1}{4} &= \frac{3}{8} \quad \text{green} \\
\frac{3}{8} &= \frac{3}{8} \quad \text{yellow} \\
24 &= \frac{3}{8} \quad \text{red}
\end{align*}
\]