Fractional Parts of a Number

Alicia had a basket with 15 cookies in it. Her friends ate \( \frac{2}{3} \) of the cookies. How many cookies did her friends eat?

Find \( \frac{2}{3} \) of 15.

Divide the total number by the denominator of the fraction.

\[
\begin{array}{c|c|c}
\text{Total} & \text{Denominator} & \text{Quotient} \\
\hline
15 & 3 & 5 \\
\end{array}
\]

Multiply the quotient by the numerator of the fraction.

\[
\begin{array}{c|c|c|c}
\text{Quotient} & \text{Numerator} & \text{Fractional part} \\
\hline
5 & 2 & \frac{10}{3} \\
\end{array}
\]

\( \frac{2}{3} \) of 15 is 10.

Solution: Alicia's friends ate 10 cookies.

Find the fractional part of each number.

1. \( \frac{1}{2} \) of 14
2. \( \frac{3}{4} \) of 12
3. \( \frac{2}{5} \) of 10
4. \( \frac{2}{3} \) of 9
5. \( \frac{3}{5} \) of 20
6. \( \frac{1}{6} \) of 18
7. \( \frac{4}{3} \) of 12
8. \( \frac{3}{7} \) of 14
9. \( \frac{4}{5} \) of 25
10. \( \frac{3}{7} \) of 21
11. \( \frac{5}{8} \) of 24
12. \( \frac{1}{3} \) of 30

Writing Math Blake has 15 musical instruments. Guitars make up two-fifths of the instruments Blake has. How many of the musical instruments are guitars? Explain.