## Dividing Whole Numbers by Unit Fractions

How can you divide a whole number by a fraction?

| $2 \div \frac{1}{3}$ | Think: How can I divide two into one-thirds? |
| :---: | :---: |
| 1. Two is the sum of one plus one. | $2=1+$ |
| 2. Each one is the sum of three one-thirds. <br> 3. Count the number of one-thirds. | $\begin{gathered} \downarrow \downarrow \downarrow \downarrow \downarrow \\ \frac{1}{3}+\frac{1}{3}+\frac{1}{3}+\frac{1}{3}+\frac{1}{3}+\frac{1}{3} \end{gathered}$ |
|  | 6 |
| Check To divide a whole number by a fraction, multiply the whole number by the reciprocal of the fraction. | $2 \div \frac{1}{3}=2 \times \frac{3}{1}=\frac{2}{1} \times \frac{3}{1}=\frac{6}{1}=6$ |


| $3 \div \frac{3}{4}$ | Think: How can I divide three into three-fourths? |
| :---: | :---: |
| 1. Three is the sum of one plus one plus one. | $3=\lambda^{1}+\lambda^{1}+{ }^{1}$ |
| 2. Each one is the sum of one three-fourths and one one-fourth. | $\frac{3}{4}+\frac{1}{4}+\frac{3}{4}+\frac{1}{4}+\frac{3}{4}+\frac{1}{4}$ |
|  | $\frac{3}{4}+\frac{3}{4}+\frac{3}{4}+\frac{1}{4}+\frac{1}{4}+\frac{1}{4}$ |
| 3. Count the number of three-fourths. | $\frac{3}{4}+\frac{3}{4}+\frac{3}{4}+\quad \frac{3}{4}$ |
| Check Multiply the whole number by the reciprocal of the fraction. | $3 \div \frac{3}{4}=3 \times \frac{4}{3}=\frac{3}{1} \times \frac{4}{3}=\frac{12}{3}=4$ |

Draw a picture that shows each division and write the answer.

1. $2 \div \frac{1}{2}$ $\qquad$ 2. $2 \div \frac{1}{3}$
