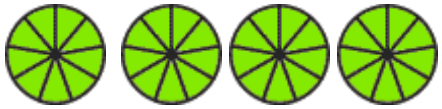
2. Divide. Think "How many times does (the divisor) go into (the dividend)?" Use pictures to help.

			
a. $3 \div \frac{1}{6} =$	**c.** $4 \div \frac{1}{9} =$		**e.** $3 \div \frac{1}{8} =$
b. $3 \div \frac{2}{6} =$	**d.** $4 \div \frac{4}{9} =$		**f.** $3 \div \frac{6}{8} =$
g. $3 \div \frac{1}{2} =$	**h.** $3 \div \frac{1}{7} =$	**i.** $4 \div \frac{1}{5} =$	**j.** $2 \div \frac{1}{3} =$

3. **a.** How many 1/2-meter pieces can you cut out of a roll of string that is 6 meters long?

b. How many 3/4-mile stretches are there in a jogging track that is 4 1/2 miles long?

c. A drinking glass measures 3/10 of a liter. How many glasses full of water do you get out of a 3-liter pitcher?

Did you notice anything? There is a shortcut to some of these kind of problems!

$5 \div \frac{1}{4}$	$3 \div \frac{1}{8}$	$9 \div \frac{1}{7}$
$\downarrow \quad \downarrow$	$\downarrow \quad \downarrow$	$\downarrow \quad \downarrow$
$5 \times 4 = 20$	$3 \times 8 = 24$	$9 \times 7 = 63$

To solve the division, multiply by the reciprocal of the divisor.

We call 1/4 and 4 reciprocal numbers. Similarly, 1/5 and 5 are reciprocal numbers.

This also makes sense. For example, in the problem $5 \div 1/4$, you can think that 1/4 goes into one exactly four times, so it goes into five exactly $5 \times 4 = 20$ times.

4. Solve. Use the shortcut.

a. $3 \div \frac{1}{6} =$	**b.** $4 \div \frac{1}{5} =$	**c.** $3 \div \frac{1}{10} =$	**d.** $5 \div \frac{1}{10} =$
e. $7 \div \frac{1}{4} =$	**f.** $4 \div \frac{1}{8} =$	**g.** $4 \div \frac{1}{10} =$	**h.** $9 \div \frac{1}{8} =$