



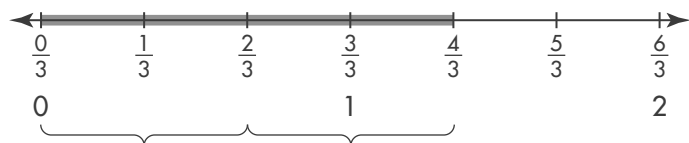
Additional Practice 10-2

Multiply a Fraction by a Whole Number: Use Models

Another Look!

Georgie walked $\frac{2}{3}$ mile to and from the gym.
How many miles did Georgie walk?

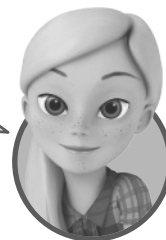
Find $2 \times \frac{2}{3}$.



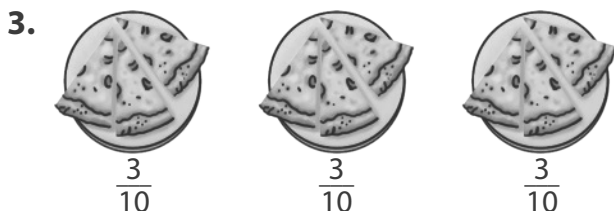
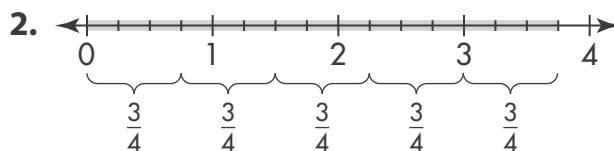
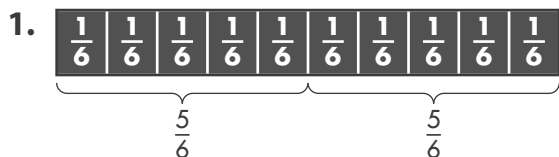
$$\begin{aligned} 2 \times \frac{2}{3} &= \frac{2}{3} + \frac{2}{3} \\ &= \frac{4}{3} \\ &= \frac{3}{3} + \frac{1}{3} = 1\frac{1}{3} \end{aligned}$$

Georgie walked $1\frac{1}{3}$ miles.

You can use a number line and repeated addition to multiply fractions and whole numbers.



For **1–6**, write and solve a multiplication equation.
Use drawings or number lines as needed.



5. Calculate the distance Penny rides her bicycle if she rides $\frac{1}{4}$ mile each day for 5 days.

6. Calculate the distance Benjamin rides his scooter if he rides $\frac{3}{5}$ mile each day for 4 days.



7. At a play, 211 guests are seated on the main floor and 142 guests are seated in the balcony. If tickets for the main floor cost \$7 and tickets for the balcony cost \$5, how much was earned in ticket sales?

8. Audrey uses $\frac{5}{8}$ cup of fruit in each smoothie she makes. She makes 6 smoothies to share with her friends. How many cups of fruit does Audrey use?

$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$
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9. Gabe is making 5 capes. He uses $\frac{2}{3}$ yard of fabric for each cape he makes. What is the total amount of fabric Gabe needs?

$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$
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10. **Use Structure** Draw a picture to show how to find $4 \times \frac{3}{5}$.

11. **Higher Order Thinking** Mark is training for a mini triathlon. He rode his bike $\frac{3}{4}$ mile, ran $\frac{2}{4}$ mile, and swam $\frac{1}{4}$ mile each day. How does the distance he biked in 3 days compare to the distance he swam in 3 days? In 5 days? In 6 days? Why?

You can use structure or draw a picture to compare the distances Mark biked and swam.



Assessment Practice

12. Ronald rode the rollercoaster 3 times. The rollercoaster track is $\frac{1}{4}$ mile in length. Select all the expressions that tell how far Ronald rode in all. Use drawings or number lines as needed.

- ☐ $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ mile
☐ $3 \times \frac{1}{4}$ mile
☐ 3×4 mile
☐ $4 + 3 \times \frac{1}{4}$ mile
☐ $\frac{3}{4}$ mile

13. Kurt swam across the lake and back. The lake is $\frac{4}{8}$ mile across. Select all the equations that can be used to find s , the total distance Kurt swam.

- ☐ $s = 2 \times \frac{4}{8}$
☐ $s = \frac{4}{8} + \frac{4}{8}$
☐ $s = 1$
☐ $s = 2 \times 8$
☐ $s = 2 + \frac{4}{8}$