

# Homework & Practice 10-2

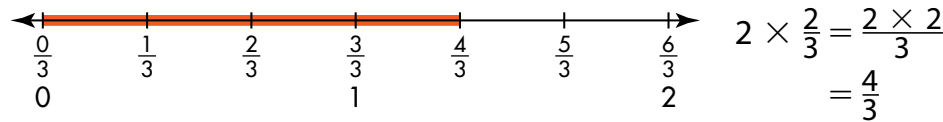
## Multiply a Fraction by a Whole Number: Use Models

### Another Look!

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

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

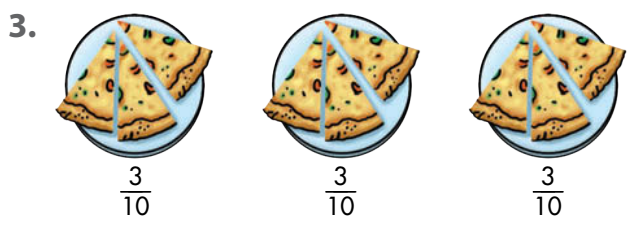
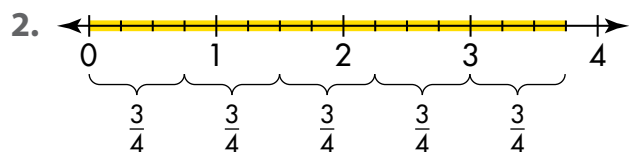
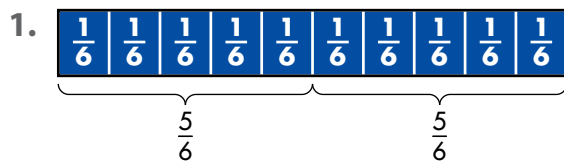
You can use a number line to help multiply fractions and whole numbers.



Georgie walked  $\frac{4}{3}$  or  $1\frac{1}{3}$  miles.



For 1–8, 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 10 days.

7. Calculate the distance Derek rows his boat if he rows  $\frac{5}{6}$  mile each day for 11 days.

8. Calculate the distance Kinsey jogs if she jogs  $\frac{7}{8}$  mile each day for 9 days.

9. 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?

10. 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?



11. 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?



12. © **MP.7 Use Structure** Explain why  $4 \times \frac{3}{5} = 12 \times \frac{1}{5}$ . Draw a picture.

13. **Higher Order Thinking** Mark is training for a mini triathlon. He rode his bike  $\frac{3}{4}$  mile, ran  $\frac{5}{6}$  mile, and swam  $\frac{10}{12}$  mile each day for 7 days. What combined distance did Mark exercise during the week?

Find equivalent fractions and add the fractions first.



### © Common Core Assessment

14. Select all the expressions that represent the following story. Ronald rode the rollercoaster 3 times. The rollercoaster track is  $\frac{1}{4}$  mile in length. Use drawings or number lines as needed.

- $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$   
  $3 \times \frac{1}{4}$   
  $3 \times 4$   
  $4 + 3 \times \frac{1}{4}$   
  $\frac{3}{4}$

15. Select all the expressions that represent the following story. Kurt swam across the lake and back. The lake is  $\frac{4}{8}$  mile across. Use drawings or number lines as needed.

- $2 \times \frac{4}{8}$   
  $\frac{4}{8} + \frac{4}{8}$   
  $4 \times \frac{2}{8}$   
  $8 \times \frac{4}{8}$   
  $2 + \frac{4}{8}$