Assignment

LESSON 3: Did You Get the Part?

Write

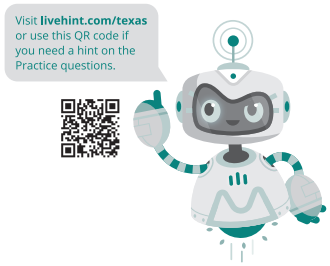
Explain how to use an area model to represent the multiplication of two mixed numbers.

Remember

When multiplying two mixed numbers, rewrite each mixed number as an improper fraction before using the standard algorithm to calculate the product.

Practice

Read and solve each problem.



1. Sara has an exercise routine that includes swimming, cycling, and running. The table shows the distances of each portion of her routine.

Exercise	Distance
Swimming	$\frac{2}{3}$ miles
Cycling	$10\frac{1}{2}$ miles
Running	$5\frac{3}{4}$ miles

   a. If Sara completes her routine each day this week, how many miles would she swim this week?

   b. If Sara completes her routine each day this week, how many miles would she cycle this week?

2. Tristan is putting new sod down in his rectangular yard. His yard measures $6\frac{1}{5}$ meters by $8\frac{1}{3}$ meters. What is the area of the yard?

Calculate each product. Show your work.

3. $3\frac{1}{2} \times 4\frac{5}{8}$

4. $12 \times 2\frac{2}{3}$

5. $7\frac{1}{5} \times 1\frac{5}{6}$

6. $2\frac{4}{5} \times 7$

7. $8\frac{1}{3} \times 3\frac{2}{5}$

8. $5\frac{3}{4} \times 4\frac{1}{10}$

Stretch

Write a rule for when the product of two mixed numbers is a whole number. Give an example that follows your rule.

Review

Identify the expression that shows a correct way to decompose each multiplication statement.

1. 10×8
2. 9×12
3. 13×7
4. 9×8
5. 12×6
6. 13×11

a. $9(8 + 4)$
b. $13(7 + 4)$
c. $9(6 + 2)$
d. $10(7 + 1)$
e. $12(3 \times 3)$
f. $10(4 \times 4)$
g. $13(3 + 4)$
h. $12(4 + 2)$

7. Estimate and then calculate each product.

   a. 625×34 b. 1014×59