Name _____   Date _____

1. Draw a tape diagram to represent $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3}$.

2. Draw a tape diagram to represent $\frac{7}{8} + \frac{7}{8} + \frac{7}{8}$.

Write a multiplication expression equal to $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3}$.

Write a multiplication expression equal to $\frac{7}{8} + \frac{7}{8} + \frac{7}{8}$.

3. Rewrite each repeated addition problem as a multiplication problem and solve. Express the result as a mixed number. The first one has been completed for you.

   a. $\frac{7}{5} + \frac{7}{5} + \frac{7}{5} + \frac{7}{5} = 4 \times \frac{7}{5} = \frac{4 \times 7}{5} = \frac{28}{5} = 5\frac{3}{5}$

   b. $\frac{7}{10} + \frac{7}{10} + \frac{7}{10}$

   c. $\frac{5}{12} + \frac{5}{12} + \frac{5}{12} + \frac{5}{12} + \frac{5}{12} + \frac{5}{12}$

   d. $\frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8}$

4. Solve using any method. Express your answers as whole or mixed numbers.

   a. $7 \times \frac{2}{9}$

   b. $11 \times \frac{2}{3}$

COMMON CORE

Lesson 36: Represent the multiplication of *n* times *a/b* as (*n* × *a*)/*b* using the associative property and visual models.
Date: 3/7/14

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c. $40 \times \frac{2}{6}$

d. $24 \times \frac{5}{6}$

e. $23 \times \frac{3}{5}$

f. $34 \times \frac{2}{8}$

5. Coleton is playing with interlocking blocks that are each $\frac{3}{4}$ inch tall. He makes a tower 17 blocks tall. How tall is his tower in inches?

6. There were 11 players on Mr. Maiorani's softball team. They each ate $\frac{3}{8}$ of a pizza. How many pizzas did they eat?

7. A bricklayer places 12 bricks along an outside wall of a shed. Each brick is $\frac{3}{4}$ foot long. How many feet long is that wall of the shed?

COMMON CORE

Lesson 36:   Represent the multiplication of *n* times *a/b* as (*n* × *a*)/*b* using the associative property and visual models.

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