

Name _____

Multiply Mixed Numbers**COMMON CORE STANDARD—5.NF.6**
*Apply and extend previous understandings of multiplication and division to multiply and divide fractions.***Find the product. Write the product in simplest form.**

$$\begin{aligned}
 1. \quad & 1\frac{2}{3} \times 4\frac{2}{5} \\
 & 1\frac{2}{3} \times 4\frac{2}{5} = \frac{5}{3} \times \frac{22}{5} \\
 & = \frac{110}{15} = \frac{22}{3} \\
 & = 7\frac{1}{3}
 \end{aligned}$$

2. $1\frac{1}{7} \times 1\frac{3}{4}$

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

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

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

6. $7\frac{1}{5} \times 2\frac{1}{6}$

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

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

Use the Distributive Property to find the product.

9. $4\frac{2}{5} \times 10$

10. $26 \times 2\frac{1}{2}$

11. $6 \times 3\frac{2}{3}$

Problem Solving

12. Jake can carry $6\frac{1}{4}$ pounds of wood in from the barn. His father can carry $1\frac{5}{7}$ times as much as Jake. How many pounds can Jake's father carry?

13. A glass can hold $3\frac{1}{3}$ cups of water. A bowl can hold $2\frac{3}{5}$ times the amount in the glass. How many cups can a bowl hold?

Lesson Check (5.NF.6)

1. A vet weighs two puppies. The small puppy weighs $4\frac{1}{2}$ pounds. The large puppy weighs $4\frac{2}{3}$ times as much as the small puppy. How much does the large puppy weigh?
2. Becky lives $5\frac{5}{8}$ miles from school. Steve lives $1\frac{5}{9}$ times as far from school as Becky. How far does Steve live from school?

Spiral Review (5.OA.2, 5.NBT.6, 5.NF.1, 5.NF.2)

3. Craig scored 12 points in a game. Marla scored twice as many points as Craig but 5 fewer points than Nelson scored. Write an expression to represent how many points Nelson scored.
4. Yvette earned \$66.00 for 8 hours of work. Lizbeth earned \$68.80 working the same amount of time. How much more per hour did Lizbeth earn than Yvette?

5. What is the least common denominator of the four fractions listed below?

$$20\frac{7}{10} \quad 20\frac{3}{4} \quad 18\frac{9}{10} \quad 20\frac{18}{25}$$

6. Three girls collected geodes in the desert. Corinne collected $11\frac{1}{8}$ pounds, Ellen collected $4\frac{5}{8}$ pounds, and Leonda collected $3\frac{3}{4}$ pounds. How much more did Corinne collect than the other two girls combined?

Name _____

Problem Solving • Find Unknown Lengths



COMMON CORE STANDARD—5.NF.5b
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

1. Kamal's bedroom has an area of 120 square feet. The width of the room is $\frac{5}{6}$ the length of the room. What are the dimensions of Kamal's bedroom?

Guess: $6 \times 20 = 120$

Check: $\frac{5}{6} \times 20 = 16\frac{2}{3}$; try a longer width.

Guess: $10 \times 12 = 120$

Check: $\frac{5}{6} \times 12 = 10$. Correct!

10 feet by 12 feet

2. Marisol is painting on a piece of canvas that has an area of 180 square inches. The length of the painting is $1\frac{1}{4}$ times the width. What are the dimensions of the painting?
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3. A small plane is flying a banner in the shape of a rectangle. The area of the banner is 144 square feet. The width of the banner is $\frac{1}{4}$ the length of the banner. What are the dimensions of the banner?
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4. An artificial lake is in the shape of a rectangle and has an area of $\frac{9}{20}$ square mile. The width of the lake is $\frac{1}{5}$ the length of the lake. What are the dimensions of the lake?
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Lesson Check (5.NF.5b)

1. Consuelo's living room is in the shape of a rectangle and has an area of 360 square feet. The width of the living room is $\frac{5}{8}$ its length. What is the length of the living room?
2. A rectangular park has an area of $\frac{2}{3}$ square mile. The length of the park is $2\frac{2}{3}$ the width of the park. What is the width of the park?

Spiral Review (5.NBT.4, 5.NF.1, 5.NF.4a, 5.NF.5a, 5.NF.5b)

3. Debra babysits for $3\frac{1}{2}$ hours on Friday and $1\frac{1}{2}$ times as long on Saturday. Did Debra babysit more, fewer, or the same number of hours on Saturday than she did on Friday?
4. Tory practiced her basketball shots for $\frac{2}{3}$ hour. Tim practiced his basketball shots for $\frac{3}{4}$ as much time as Tory did. How long did Tim practice his basketball shots?

5. Leah bought $4\frac{1}{2}$ pounds of grapes. Of the grapes she bought, $1\frac{7}{8}$ pounds were red grapes. The rest were green grapes. How many pounds of green grapes did Leah buy?
6. To which place value is the following number rounded?
5.927 to 5.93
