

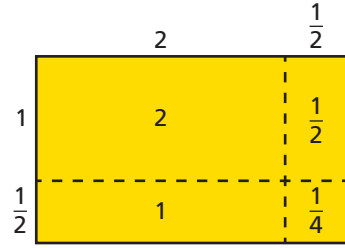
Key Concept and Vocabulary

$$2\frac{1}{2} \times 1\frac{1}{2} = \frac{5}{2} \times \frac{3}{2} = \frac{15}{4} = 3\frac{3}{4}$$

Rewrite as improper fractions.



Visual Model



$$\text{Area} = 2 + 1 + \frac{1}{2} + \frac{1}{4} = 3\frac{3}{4}$$

Skill Examples

- $3\frac{1}{2} \times 2\frac{1}{3} = \frac{7}{2} \times \frac{7}{3} = \frac{49}{6} = 8\frac{1}{6}$
- $1\frac{3}{4} \times 4\frac{1}{2} = \frac{7}{4} \times \frac{9}{2} = \frac{63}{8} = 7\frac{7}{8}$
- $2\frac{2}{5} \times 1\frac{2}{3} = \frac{12}{5} \times \frac{5}{3} = \frac{60}{15} = 4$
- $1\frac{1}{2} \times 1\frac{1}{2} = \frac{3}{2} \times \frac{3}{2} = \frac{9}{4} = 2\frac{1}{4}$

Application Example

- Your friend earns $7\frac{1}{2}$ dollars each hour she works. How much money will she earn after working $4\frac{1}{2}$ hours?

$$7\frac{1}{2} \times 4\frac{1}{2} = \frac{15}{2} \times \frac{9}{2} = \frac{135}{4} = 33\frac{3}{4}$$

She will earn $33\frac{3}{4}$ dollars, or \$33.75.



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Check your answers at BigIdeasMath.com.

Find the product. Write your answer in simplest form.

- $2\frac{1}{3} \times 1\frac{1}{3} =$ _____
- $4\frac{2}{3} \times 1\frac{1}{2} =$ _____
- $1\frac{1}{2} \times 3 =$ _____
- $5\frac{1}{6} \times \frac{1}{3} =$ _____
- $\frac{3}{4} \times 3\frac{1}{2} =$ _____
- $5 \times 4\frac{1}{2} =$ _____
- $2\frac{1}{7} \times \frac{7}{15} =$ _____
- $1\frac{3}{5} \times \frac{3}{8} =$ _____
- $1\frac{1}{3} \times 1\frac{1}{3} =$ _____
- $2\frac{2}{3} \times 3\frac{1}{3} =$ _____
- $2\frac{1}{4} \times 8 =$ _____
- $3\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} =$ _____

Find the area of the rectangle.

18. Area = _____

19. Area = _____

- RECIPE** Rewrite the recipe so that each ingredient is one-third of the full recipe.

$2\frac{1}{2}$ cups flour
 2 tsp baking powder
 4 Tbsp butter
 $\frac{1}{2}$ tsp salt
 $\frac{3}{4}$ cup milk

- _____ cup flour _____ tsp salt
 _____ tsp baking powder _____ cup milk
 _____ Tbsp butter