

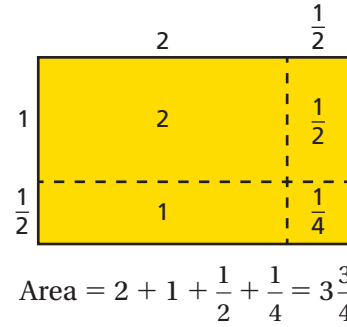
Key Concept and Vocabulary

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

Rewrite as improper fractions.



Visual Model



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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|---|---|--|--|
| 6. $2\frac{1}{3} \times 1\frac{1}{3} = \underline{3\frac{1}{9}}$ | 7. $4\frac{2}{3} \times 1\frac{1}{2} = \underline{7}$ | 8. $1\frac{1}{2} \times 3 = \underline{4\frac{1}{2}}$ | 9. $5\frac{1}{6} \times \frac{1}{3} = \underline{1\frac{13}{18}}$ |
| 10. $\frac{3}{4} \times 3\frac{1}{2} = \underline{2\frac{5}{8}}$ | 11. $5 \times 4\frac{1}{2} = \underline{22\frac{1}{2}}$ | 12. $2\frac{1}{7} \times \frac{7}{15} = \underline{1}$ | 13. $1\frac{3}{5} \times \frac{3}{8} = \underline{\frac{3}{5}}$ |
| 14. $1\frac{1}{3} \times 1\frac{1}{3} = \underline{1\frac{7}{9}}$ | 15. $2\frac{2}{3} \times 3\frac{1}{3} = \underline{8\frac{1}{3}}$ | 16. $2\frac{1}{4} \times 8 = \underline{18}$ | 17. $3\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \underline{\frac{7}{8}}$ |

Find the area of the rectangle.

18. Area = $\underline{3\frac{3}{4} \text{ in.}^2}$

19. Area = $\underline{10\frac{2}{3} \text{ cm}^2}$

20. **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

$\underline{\frac{5}{6}}$ cup flour
 $\underline{\frac{2}{3}}$ tsp baking powder
 $\underline{1\frac{1}{3}}$ Tbsp butter
 $\underline{\frac{1}{6}}$ tsp salt
 $\underline{\frac{1}{4}}$ cup milk