

Name \_\_\_\_\_

Area and Mixed Numbers



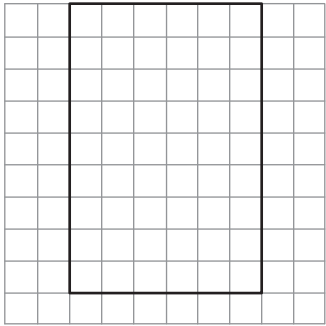
COMMON CORE STANDARD—5.NF.B.4b

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Use the grid to find the area.

1. Let each square represent  $\frac{1}{4}$  unit by  $\frac{1}{4}$  unit.

$$2\frac{1}{4} \times 1\frac{1}{2} = 3\frac{3}{8}$$



54 squares cover the diagram.

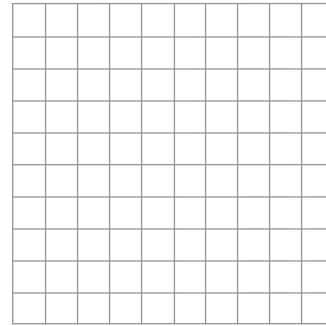
Each square is  $\frac{1}{16}$  square unit.

The area of the diagram is

$$54 \times \frac{1}{16} = \frac{54}{16} = 3\frac{3}{8} \text{ square units.}$$

2. Let each square represent  $\frac{1}{3}$  unit by  $\frac{1}{3}$  unit.

$$1\frac{2}{3} \times 2\frac{1}{3} = \underline{\hspace{2cm}}$$



The area is \_\_\_\_\_ square units.

Use an area model to solve.

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

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

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

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Problem Solving



6. Ava's bedroom rug is  $2\frac{3}{4}$  feet long and  $2\frac{1}{2}$  feet wide. What is the area of the rug?

\_\_\_\_\_

7. A painting is  $2\frac{2}{3}$  feet long and  $1\frac{1}{2}$  feet high. What is the area of the painting?

\_\_\_\_\_

8. **WRITE** *Math* Draw a shape with fractional side lengths. Describe how you will find its area.

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