

# REVIEW: Dividing Fractions

Name \_\_\_\_\_

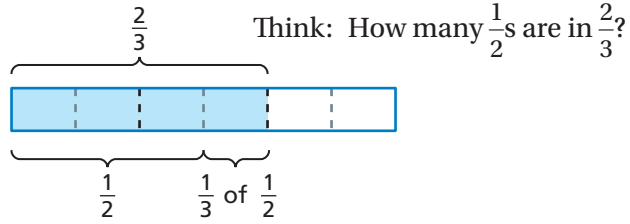
## Key Concept and Vocabulary

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

Invert and multiply.



## Visual Model



There are  $1\frac{1}{3}$ , or  $\frac{4}{3}$ , one-halves in  $\frac{2}{3}$ .

## Skill Examples

1.  $\frac{2}{5} \div \frac{1}{5} = \frac{2}{5} \times \frac{5}{1} = \frac{2 \times 5}{5 \times 1} = \frac{10}{5} = 2$

2.  $\frac{9}{4} \div \frac{3}{4} = \frac{9}{4} \times \frac{4}{3} = \frac{9 \times 4}{4 \times 3} = \frac{36}{12} = 3$

3.  $\frac{1}{6} \div \frac{2}{3} = \frac{1}{6} \times \frac{3}{2} = \frac{1 \times 3}{6 \times 2} = \frac{3}{12} = \frac{1}{4}$

4.  $\frac{3}{4} \div \frac{5}{12} = \frac{3}{4} \times \frac{12}{5} = \frac{3 \times 12}{4 \times 5} = \frac{36}{20} = \frac{9}{5}$

## Application Example

5. There are  $\frac{3}{2}$  cups of trail mix in a bag. A serving of trail mix is  $\frac{1}{4}$  cup. How many servings of trail mix are in the bag?

$$\frac{3}{2} \div \frac{1}{4} = \frac{3}{2} \times \frac{4}{1} = \frac{3 \times 4}{2 \times 1} = \frac{12}{2} = 6$$

There are 6 servings of trail mix in the bag.

## PRACTICE MAKES PURR-FECT®



Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

Find the quotient.

6.  $\frac{3}{5} \div \frac{1}{5} = \frac{15}{5}, \text{ or } 3$

7.  $\frac{1}{2} \div \frac{1}{8} = \frac{8}{2}, \text{ or } 4$

8.  $\frac{2}{3} \div \frac{1}{6} = \frac{12}{3}, \text{ or } 4$

9.  $\frac{1}{5} \div \frac{2}{3} = \frac{3}{10}$

10.  $\frac{2}{3} \div \frac{3}{4} = \frac{8}{9}$

11.  $\frac{4}{5} \div \frac{3}{10} = \frac{40}{15}, \text{ or } \frac{8}{3}$

12.  $\frac{3}{8} \div \frac{3}{8} = \frac{24}{24}, \text{ or } 1$

13.  $\frac{1}{3} \div \frac{5}{6} = \frac{6}{15}, \text{ or } \frac{2}{5}$

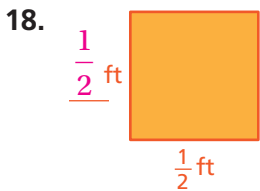
14.  $\frac{2}{3} \div \frac{2}{9} = \frac{18}{6}, \text{ or } 3$

15.  $\frac{9}{4} \div \frac{1}{4} = \frac{36}{4}, \text{ or } 9$

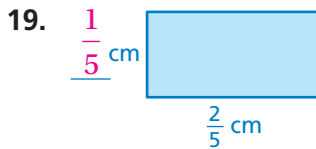
16.  $\frac{3}{4} \div \frac{2}{3} = \frac{9}{8}$

17.  $\frac{7}{10} \div \frac{3}{8} = \frac{56}{30}, \text{ or } \frac{28}{15}$

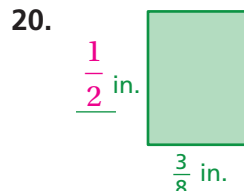
Find the unknown measure of the rectangle.



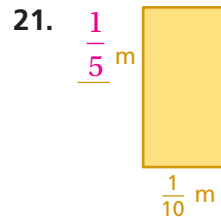
Area =  $\frac{1}{4}$  ft<sup>2</sup>



Area =  $\frac{2}{25}$  cm<sup>2</sup>



Area =  $\frac{3}{16}$  in.<sup>2</sup>



Area =  $\frac{1}{50}$  m<sup>2</sup>

22. **MAGNETIC TAPE** A refrigerator magnet uses  $\frac{5}{8}$  inch of magnetic tape. How many refrigerator magnets can you make with  $9\frac{3}{8}$  inches of magnetic tape? Explain.

15 magnets;  $9\frac{3}{8} = \frac{75}{8}, \frac{75}{8} \div \frac{5}{8} = \frac{75}{8} \times \frac{8}{5} = \frac{600}{40} = 15$