

NAME \_\_\_\_\_

Module 6 Computational Fluency of Fractions  
Lesson 6 Dividing Fractions

# Challenge Problems

6.6

Set 1

1 Model  $\frac{1}{2} \div 2$ . Explain how you found the quotient.

2 Explain how to model  $3\frac{3}{4} \div \frac{1}{4}$ .

3 When you divide a proper fraction by a proper fraction, when will the quotient be greater than one? Equal to one? Explain your answer.

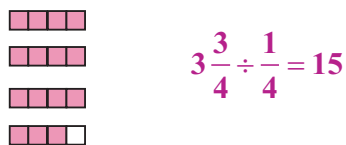
## Possible Answers

### Set 1

1. Model  $\frac{1}{2}$ . Divide each half into two parts. Each part represents  $\frac{1}{4}$ . There are two equal groups of  $\frac{1}{4}$  shaded.  $\frac{1}{2} \div 2 = \frac{1}{4}$



2. Model four ones each divided into fourths. Three would be completely shaded, and the fourth would have three of the four sections shaded. Count the number of fourths that are shaded. There are 15, so the quotient is 15.



3. For the quotient of any division problem to be greater than one, the dividend must be greater than the divisor. For the quotient to be equal to one, the dividend must be equal to the divisor because any number divided by itself is equal to one.