Name _____   Date _____

1. How many $\frac{1}{2}$ portions are in $4\frac{1}{2}$?
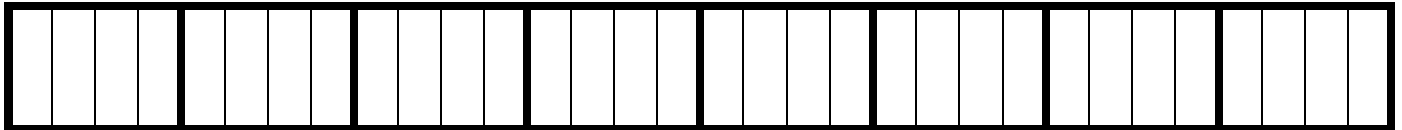
Multiplication Equation:	Division Equation:

a) Describe a real world situation for this model.

b) What does the quotient represent?

2.   How many $\frac{3}{4}$ portions are in $7\frac{3}{4}$?

Multiplication Equation:	Division Equation:

a) Describe a real world situation for this model.

b) What does the fraction in the quotient represent?

3. How many $\frac{3}{4}$ portions are in $3\frac{1}{2}$?

Multiplication Equation:	Division Equation:

a) Describe a real world situation for this model.

b) What does the fraction in the quotient represent?

4. How many $\frac{5}{6}$ portions are in $2\frac{1}{3}$?

Multiplication Equation:	Division Equation:

a) Describe a real world situation for this model.

b) What does the fraction in the quotient represent?

5.   How many $\frac{3}{8}$ portions are in $\frac{15}{16}$?

Multiplication Equation:	Division Equation:

a)   Describe a real world situation for this model.

b)   What does the fraction in the quotient represent?

6.   How many $\frac{2}{3}$ portions are in $\frac{5}{12}$?

Multiplication Equation:	Division Equation:

a)   Describe a real world situation for this model.

b)   What does the fraction in the quotient represent?

7. How many $\frac{1}{2}$ portions are in $\frac{1}{8}$?

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<div style="border:3px solid black; height:60px;"></div>

Multiplication Equation:	Division Equation:

a) Describe a real world situation for this model.

b) What does the fraction in the quotient represent?

8. Make your own problem and model for dividing a fraction by a fraction.

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Multiplication Equation:	Division Equation:

What do you notice about dividing fractions?

TEACHER NOTES

Make a model and record the equations for each situation.

1. How many $\frac{1}{2}$ portions are in $4\frac{1}{2}$?
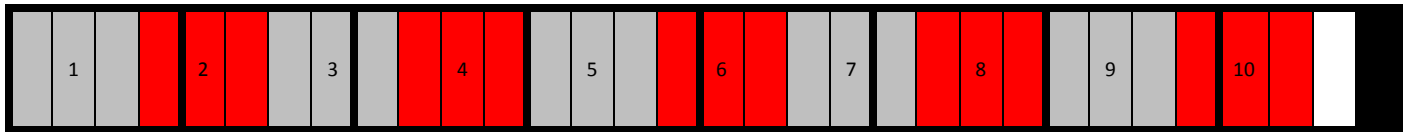

Multiplication Equation:	Division Equation:
$? \times \dfrac{1}{2} = 4\dfrac{1}{2}$	$4\dfrac{1}{2} \div \dfrac{1}{2} = 9$

a) Describe a real world situation for this model. Answers will vary.

b) What does the quotient represent in this area model? The quotient represents the number of portions when each portion is ½ of a unit.

2. How many $\frac{3}{4}$ portions are in $7\frac{3}{4}$?

Multiplication Equation:	Division Equation:
$? \times \dfrac{3}{4} = 8$	$8 \div \dfrac{3}{4} = 10\dfrac{1}{3}$

a) Describe a real world situation for this model. Answers will vary.

b) What does the fraction in the quotient represent? The fraction 1/3 is indicated by the 1 partition that remains after shading ¾ portions. Since each portion is 3 of the partitions, we have 1 of the 3 partitions remaining, or 1/3.

3.   How many $\frac{3}{4}$ portions are in $3\frac{1}{2}$?
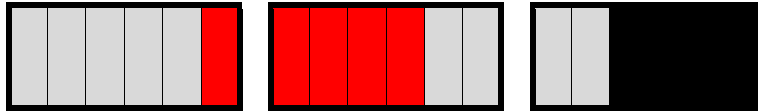

Multiplication Equation:	Division Equation:
$? \times \dfrac{3}{4} = 3\dfrac{1}{2}$	$3\dfrac{1}{2} \div \dfrac{3}{4} = 4\dfrac{2}{3}$

a)   Describe a real world situation for this model. Answers will vary.

b)   What does the fraction in the quotient represent? The fraction 2/3 is indicated by the 2 partitions that remain after shading ¾ portions. Since each portion is 3 of the partitions, we have 2 of the 3 partitions remaining, or 2/3.

4.   How many $\frac{5}{6}$ portions are in $2\frac{1}{3}$?
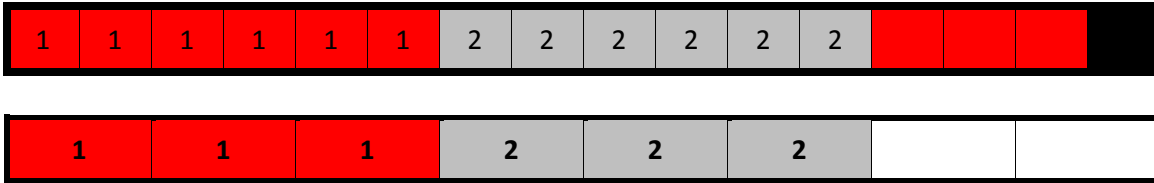

Multiplication Equation:	Division Equation:
$? \times \dfrac{5}{6} = 2\dfrac{1}{3}$	$2\dfrac{1}{3} \div \dfrac{5}{6} = 2\dfrac{4}{5}$

a)   Describe a real world situation for this model. Answers will vary.

b)   What does the fraction in the quotient represent? The fraction 4/5 is indicated by the 4 partitions that remain after shading 5/6 portions. Since each portion is 5 of the partitions, we have 4 of the 5 partitions remaining, or 5/6.

5. How many $\frac{3}{8}$ portions are in $\frac{15}{16}$?

| 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |

| 1 | 1 | 1 | 2 | 2 | 2 | | |

Multiplication Equation:	Division Equation:
$? \times \dfrac{3}{8} = \dfrac{15}{16}$	$\dfrac{15}{16} \div \dfrac{3}{8} = 2\dfrac{3}{6}$

a) Describe a real world situation for this model. Answers will vary.

b) What does the fraction in the quotient represent? The fraction 3/6 is indicated by the 3 partitions that remain after shading 6/16 (or 3/8) portions. Since each portion is 6 of the partitions, we have 3 of the partitions remaining, or 3/6.   You may wish to point out that 3/6 = ½, so the answer of 2 ½ would also be correct.
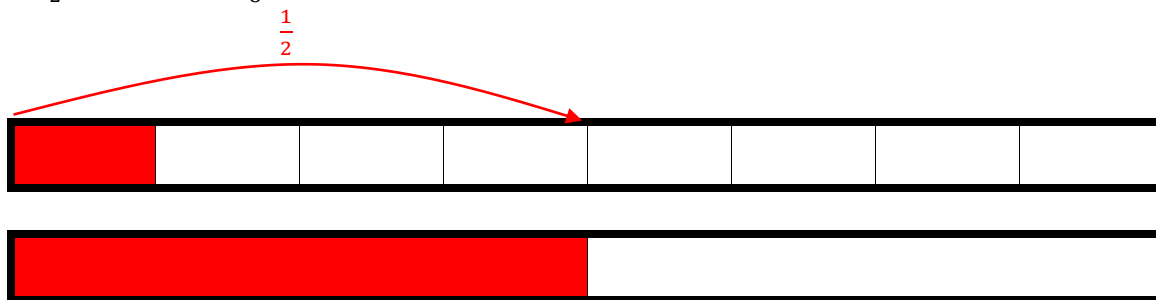
6. How many $\frac{2}{3}$ portions are in $\frac{5}{12}$?

$\frac{2}{3}$

| | | | | | | | | | | | |

| | | |
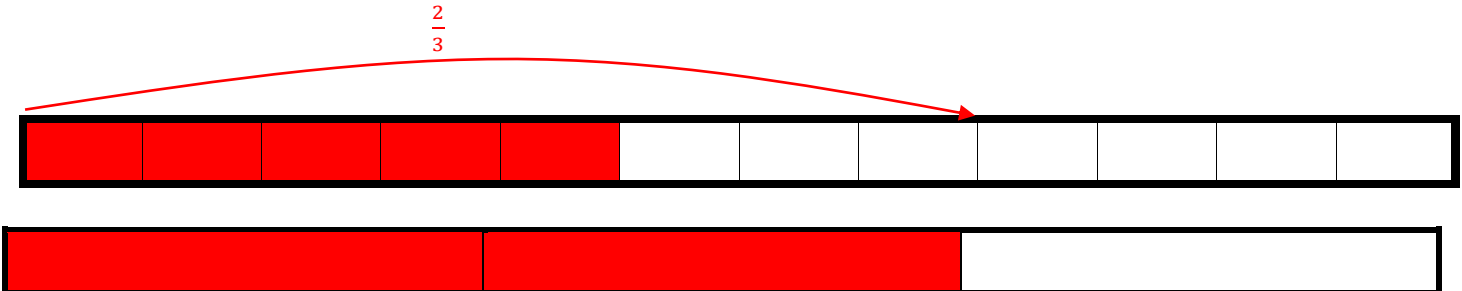
Multiplication Equation:	Division Equation:
$? \times \dfrac{2}{3} = \dfrac{5}{12}$	$\dfrac{5}{12} \div \dfrac{2}{3} = \dfrac{5}{8}$

a) Describe a real world situation for this model. Answers will vary.

b) What does the fraction in the quotient represent? Only 5 of the boxes is shaded out of the 8 sections needed to indicate $\frac{2}{3}$ of the model. Therefore, the quotient is $\frac{5}{8}$.

7.   How many $\frac{1}{2}$ portions are in $\frac{1}{8}$?

$\frac{1}{2}$

Multiplication Equation:	Division Equation:
$? \times \dfrac{1}{2} = \dfrac{1}{8}$	$\dfrac{1}{8} \div \dfrac{1}{2} = \dfrac{1}{4}$

a)   Describe a real world situation for this model.

b)   What does the fraction in the quotient represent? Only 1 of the boxes is shaded out of the 4 sections needed to indicate ½ of the model. Therefore, the quotient is ¼.

8.   Answers will vary.