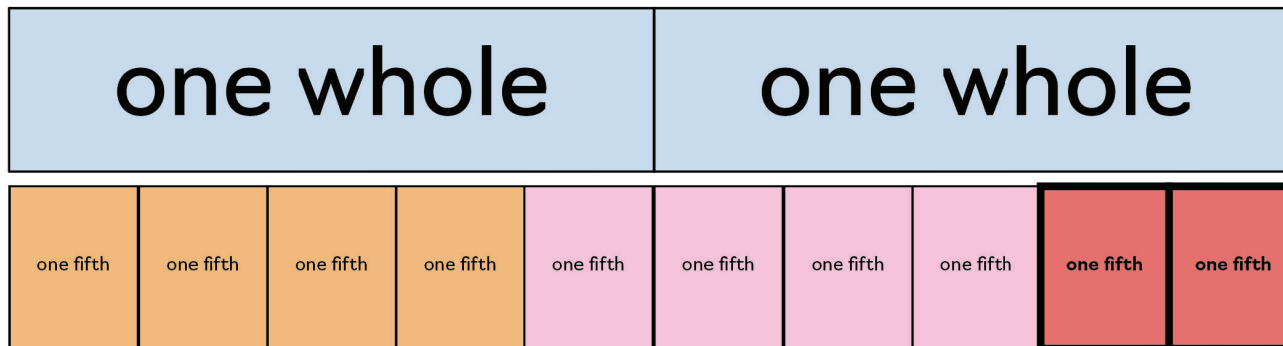


Dividing Whole Numbers by Proper Fractions

$$2 \div \frac{4}{5} = 2\frac{1}{2}$$



Hello Teachers,

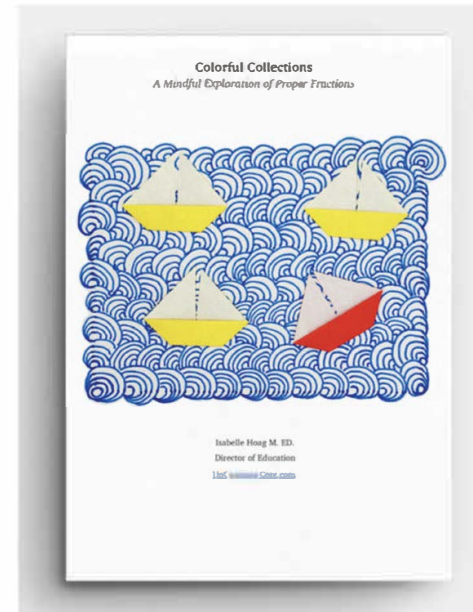
Thank you for downloading this handout. After decades of teaching, now I am sharing some of the activities I designed for my students and some new ones as well.

Please, check out the self-paced teacher education courses on UnCommon-Core.com.

While you are there, sign up for your free copy of **Colorful Collections: A Mindful Exploration of Proper Fractions**.

Also, visit my Teachers Pay Teachers store UnCommon-Core dot com.

Thank you again. All the best,



Isabelle

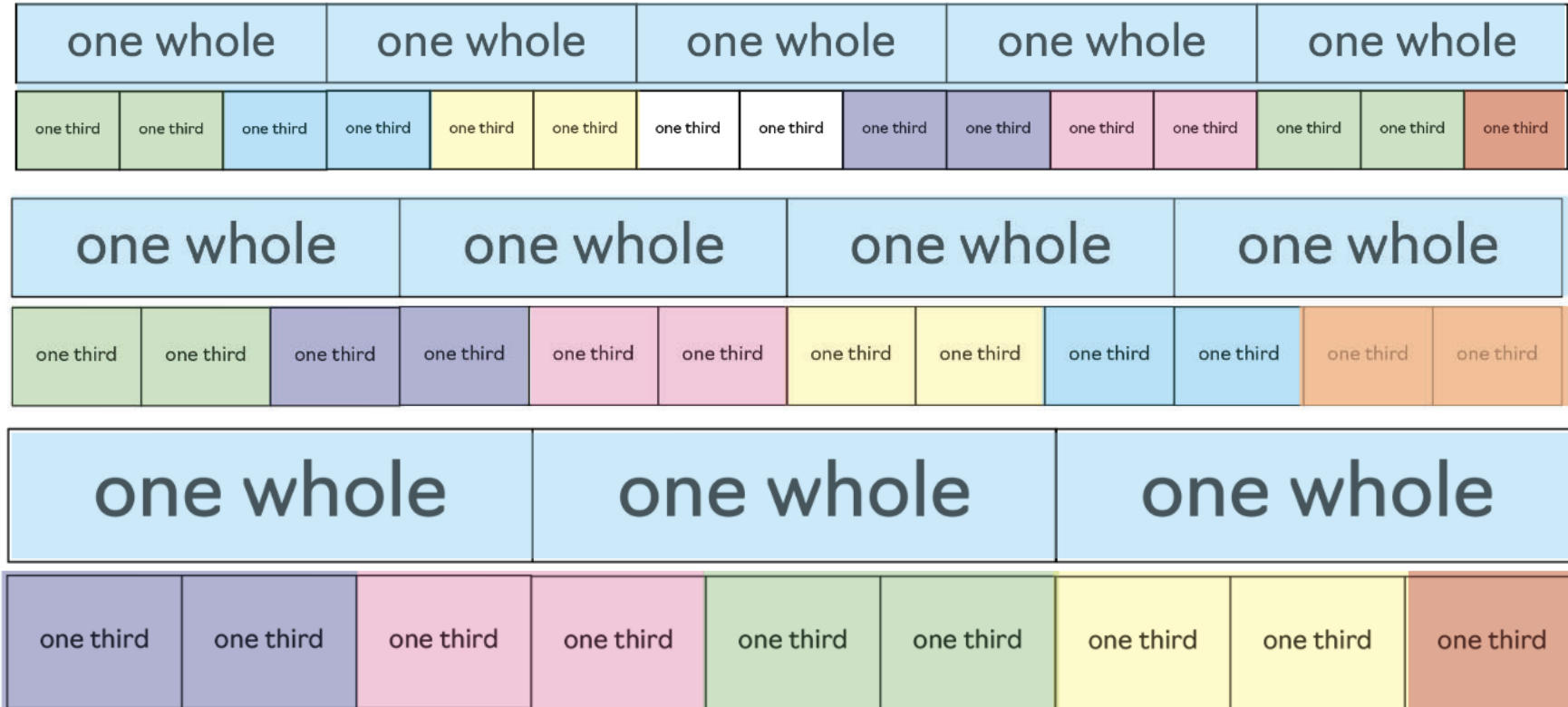
Isabelle Hoag M.Ed.
Director of Education
UnCommon-Core.com

Dividing Whole Numbers by Proper Fractions

These worksheets are an introduction to how to think about whole numbers divided by proper fractions.

Before you start, remind your students that proper fractions are made up of unit fractions. The numerator tells how many unit fractions there are. The denominator tells how many unit fractions it takes to make one whole. This relationship between the proper fraction and unit fractions is important when it comes to making sense of the remainder in these division problems.

The quotient refers to how many fractional pieces can be subtracted from the whole number dividend. Remainders are small parts of fractions which can be challenging for students to conceptualize at first.



Whole Numbers Divided by Proper Fractions

name: _____

$$1 \div \frac{2}{3} = ?$$

Write the question:

one whole

one third

one third

one third

Explain how you found the quotient, and what the quotient means.

Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.
What questions do you have?

Whole Numbers Divided by Proper Fractions

name: _____

$$2 \div \frac{2}{3} = ?$$

Write the question:



Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$3 \div \frac{2}{3} = ?$$

Write the question:

one whole

one whole

one whole

one third

one third

one third

one third

one third

one third

one third

one third

one third

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$4 \div \frac{2}{3} = ?$$

Write the question:

one whole			one whole			one whole			one whole		
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$5 \div \frac{2}{3} = ?$$

Write the question:

one whole			one whole			one whole			one whole			one whole		
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$6 \div \frac{2}{3} = ?$$

Write the question:

one whole			one whole			one whole			one whole			one whole			one whole		
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$7 \div \frac{2}{3} = ?$$

Write the question:

one whole			one whole			one whole			one whole			one whole			one whole				
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient,
and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$1 \div \frac{3}{4} = ?$$

Write the question:

one whole

one fourth	one fourth	one fourth	one fourth
------------	------------	------------	------------

Color the whole numbers light blue. Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

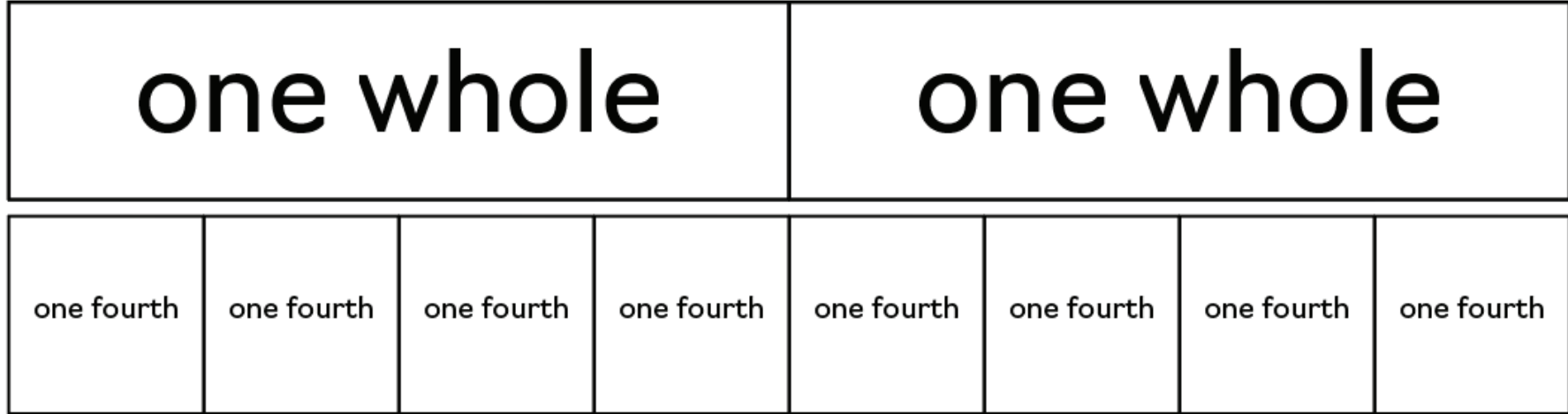
Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$2 \div \frac{3}{4} = ?$$

Write the question:



Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$3 \div \frac{3}{4} = ?$$

Write the question:

one whole	one whole	one whole
-----------	-----------	-----------

one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth
------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

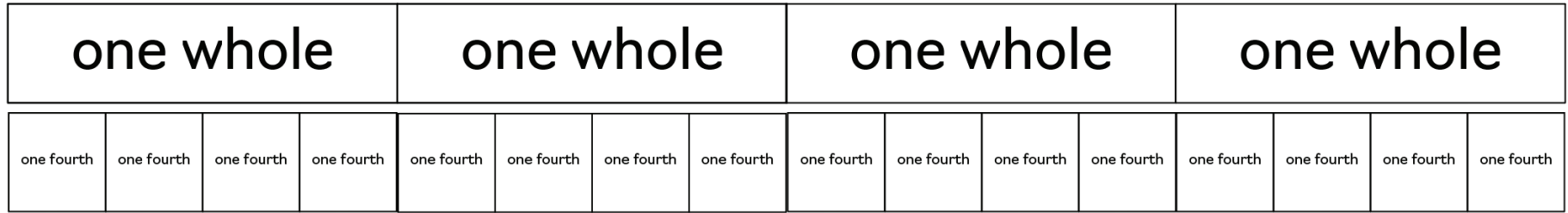
Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$4 \div \frac{3}{4} = ?$$

Write the question:



Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

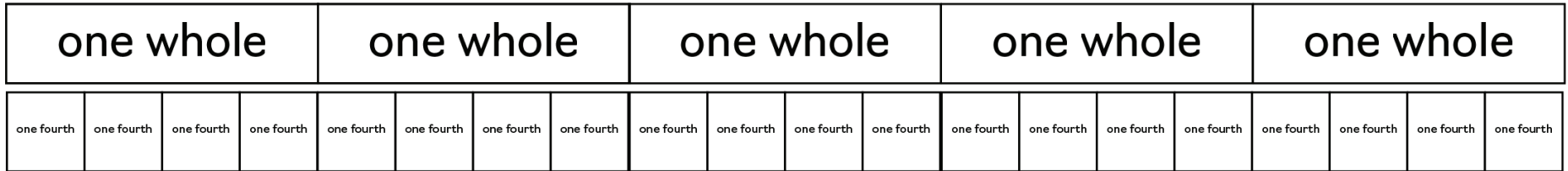
Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$5 \div \frac{3}{4} = ?$$

Write the question:



Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

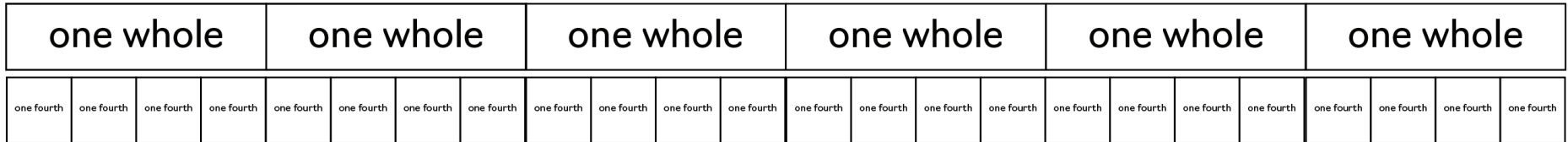
Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$6 \div \frac{3}{4} = ?$$

Write the question:



Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$7 \div \frac{3}{4} = ?$$

Write the question:

one whole				one whole				one whole				one whole				one whole				one whole								
one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth	one fourth

Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

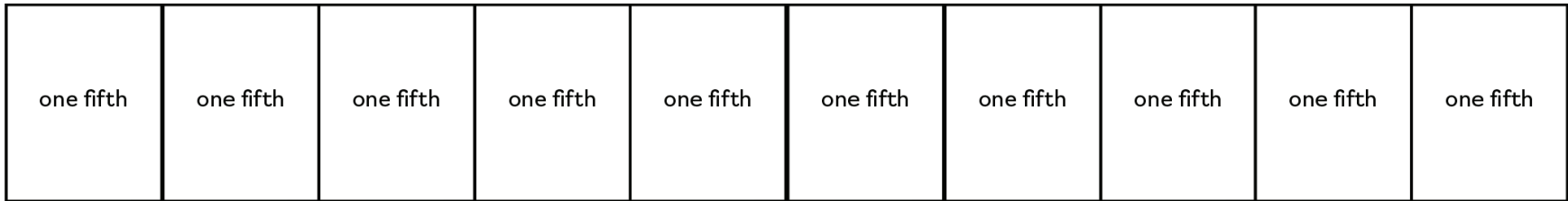
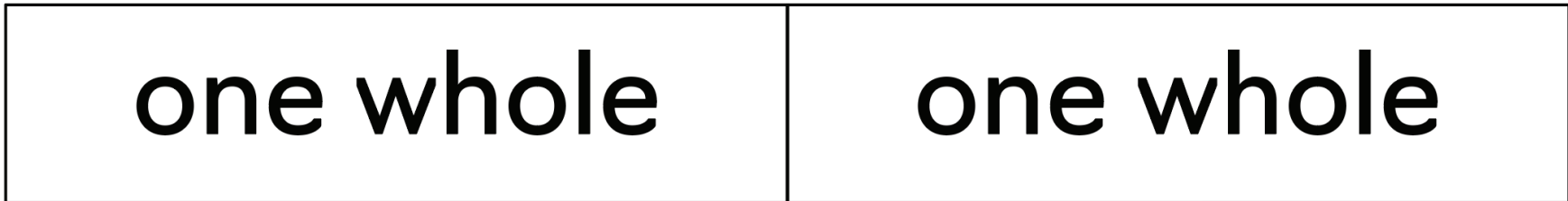
Explain how you found the quotient, and what the quotient means.

Whole Numbers Divided by Proper Fractions

name: _____

$$2 \div \frac{4}{5} = ?$$

Write the question:



Color the whole numbers light blue.

Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Division Problems

Dividends of One and Two ~ Large Fraction Bars

$$1 \div \frac{2}{3} = ?$$

$$2 \div \frac{2}{3} = ?$$

$$1 \div \frac{3}{4} = ?$$

$$2 \div \frac{3}{4} = ?$$

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

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

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

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

$$\frac{3}{2} = 1\frac{1}{2}$$

$$\frac{6}{2} = 3$$

$$\frac{4}{3} = 1\frac{1}{3}$$

$$\frac{8}{3} = 2\frac{2}{3}$$

Dividends of Three, Four, and Five ~ Medium Fraction Bars

$$3 \div \frac{2}{3} = ?$$

$$4 \div \frac{2}{3} = ?$$

$$5 \div \frac{2}{3} = ?$$

$$3 \div \frac{3}{4} = ?$$

$$4 \div \frac{3}{4} = ?$$

$$5 \div \frac{3}{4} = ?$$

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

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

$$\frac{5 \times 6}{1 \times 6} \div \frac{2}{3} = ?$$

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

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

$$\frac{5 \times 12}{1 \times 12} \div \frac{3}{4} = ?$$

$$\frac{9}{2} = 4\frac{1}{2}$$

$$\frac{12}{2} = 6$$

$$\frac{15}{2} = 7\frac{1}{2}$$

$$\frac{4}{1} = 4$$

$$\frac{16}{3} = 5\frac{1}{3}$$

$$\frac{20}{3} = 6\frac{2}{3}$$

Dividends of Six and Seven ~ Small Fraction Bars

$$6 \div \frac{2}{3} = ?$$

$$7 \div \frac{2}{3} = ?$$

$$6 \div \frac{3}{4} = ?$$

$$7 \div \frac{3}{4} = ?$$

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

$$\frac{7 \times 6}{1 \times 6} \div \frac{2}{3} = ?$$

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

$$\frac{7 \times 12}{1 \times 12} \div \frac{3}{4} = ?$$

$$\frac{18}{2} = 9$$

$$\frac{21}{2} = 10\frac{1}{2}$$

$$\frac{24}{3} = 8$$

$$\frac{28}{3} = 9\frac{1}{3}$$

Whole Numbers Divided by Proper Fractions

name: Answer Key

$$1 \div \frac{2}{3} = ?$$

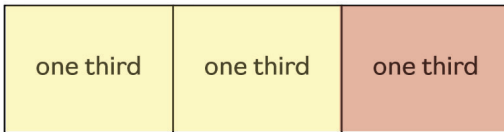
Write the question:
How many $\frac{2}{3}$ pieces are as long as one?

Explain how you found the quotient, and what the quotient means.

One divided by $\frac{2}{3}$ is $1\frac{1}{2}$.



Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes yellow to show that they went together.



After that there wasn't another group of two $\frac{1}{3}$ s to color in. I used red to show that only part of the divisor was left.

Just as one sock is half of a pair of socks, one-third is half of two-thirds.

The quotient tells how many two-third sized pieces will fit inside one. The answer is that one entire $\frac{2}{3}$ piece plus half of another match the length of one.

Color the whole numbers light blue. Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining. What questions do you have?

Answers will vary.

3

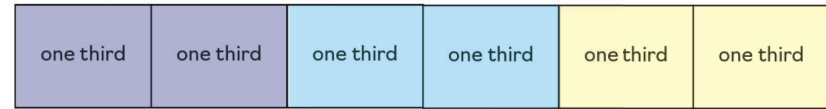
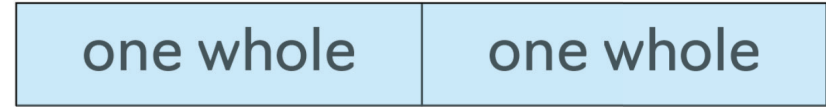
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$2 \div \frac{2}{3} = ?$$

Write the question:
How many $\frac{2}{3}$ pieces are as long as two whole pieces?



Color the whole numbers light blue. Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Two divided by $\frac{2}{3}$ is 3.

Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes violet to show that they went together. I made the next two $\frac{1}{3}$ pieces blue, and the next two yellow. There wasn't a remainder.

The quotient tells how many two-third sized pieces will fit inside one. The answer is that three entire $\frac{2}{3}$ pieces match the length of two whole pieces.

4

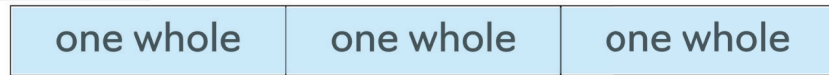
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$3 \div \frac{2}{3} = ?$$

Write the question:
How many $\frac{2}{3}$ pieces are as long as three whole pieces?



Color the whole numbers light blue. Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Three divided by $\frac{2}{3}$ is $4\frac{1}{2}$.

Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes violet to show that they went together. I made the next two $\frac{1}{3}$ pieces pink, then green, and the next two yellow. There was one-third left over so I made it red. One is half of two, so one-third is half of two-thirds.

The quotient tells how many two-third sized pieces are as long as three whole pieces. The answer is that four entire $\frac{2}{3}$ pieces plus half of another two-thirds piece match the length of three whole pieces.

5

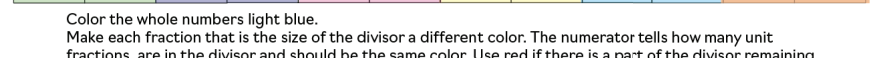
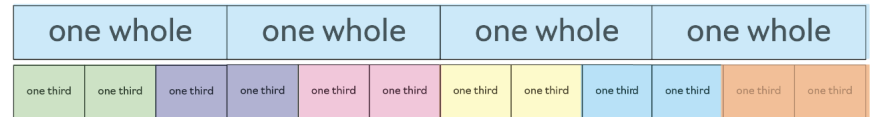
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$4 \div \frac{2}{3} = ?$$

Write the question:
How many $\frac{2}{3}$ pieces are as long as four whole pieces?



Color the whole numbers light blue. Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Four divided by $\frac{2}{3}$ is 6.

Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes green to show that they went together. I made each $\frac{2}{3}$ piece different than its neighbors. There wasn't a remainder.

The quotient tells how many two-third sized pieces will fit inside four. The answer is that six $\frac{2}{3}$ pieces match the length of four whole pieces.

6

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Whole Numbers Divided by Proper Fractions

name: Answer Key

$5 \div \frac{2}{3} = ?$

Write the question:
How many $\frac{2}{3}$ pieces are as long as five whole pieces?

one whole			one whole			one whole			one whole			one whole		
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third

Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Five divided by $\frac{2}{3}$ is $7\frac{1}{2}$.

Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes green to show that they went together. I made each $\frac{2}{3}$ piece a different color. The remainder is red.

The quotient tells how many two-third sized pieces will match the length of five whole pieces. The answer is that seven $\frac{2}{3}$ pieces plus half of another $\frac{2}{3}$ match the length of five whole pieces.

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Whole Numbers Divided by Proper Fractions

name: Answer Key

$6 \div \frac{2}{3} = ?$

Write the question:
How many $\frac{2}{3}$ pieces are as long as six whole pieces?

one whole			one whole			one whole			one whole			one whole		
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third

Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Six divided by $\frac{2}{3}$ is nine.

Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes violet to show that they went together. I made each $\frac{2}{3}$ piece a different color than the one next to it. There wasn't a remainder.

The quotient tells how many two-third sized pieces will fit inside six whole pieces. The answer is that nine entire $\frac{2}{3}$ pieces match the length of six whole pieces.

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Whole Numbers Divided by Proper Fractions

name: Answer Key

$7 \div \frac{2}{3} = ?$

Write the question:
How many $\frac{2}{3}$ pieces are as long as seven whole pieces?

one whole			one whole			one whole			one whole			one whole		
one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third	one third

Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Seven divided by $\frac{2}{3}$ is $10\frac{1}{2}$.

Since the divisor is $\frac{2}{3}$, I colored the first two $\frac{1}{3}$ boxes green to show that they went together. I made the rest different colors than the ones next to them. There was one-third left over. It's red.

The quotient tells how many two-third sized pieces will fit inside seven. The answer is that 10 entire $\frac{2}{3}$ pieces plus half of another $\frac{2}{3}$ match the length of seven whole pieces.

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Whole Numbers Divided by Proper Fractions

name: Answer Key

$1 \div \frac{3}{4} = ?$

Write the question:
How many $\frac{3}{4}$ pieces are as long as one?

one whole

one fourth	one fourth	one fourth	one fourth
------------	------------	------------	------------

Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

One divided by $\frac{3}{4}$ is $1\frac{1}{3}$.

I colored the three $\frac{1}{4}$ boxes yellow to show that they are added together to make three-fourths. There was one-fourth left over. Each $\frac{1}{4}$ piece is one of three equal pieces. So, one-fourth is a third of $\frac{3}{4}$.

The quotient tells how many three-fourth size pieces are the same length as one. The answer is that one $\frac{3}{4}$ piece plus $\frac{1}{3}$ of another match the length of one whole.

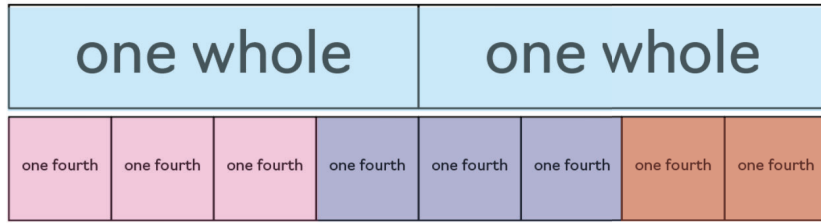
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$2 \div \frac{3}{4} = ?$$

Write the question:
How many $\frac{3}{4}$ pieces are as long as one?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Two divided by $\frac{3}{4}$ is $2\frac{2}{3}$.

The first three $\frac{1}{4}$ pieces are pink to show that added together they make three-fourths. There were two-fourths left over. Each $\frac{1}{4}$ piece is one of three equal pieces. So, two-fourths is two-thirds of $\frac{3}{4}$.

The quotient tells how many three-fourth sized pieces are the same length as two.
The answer is that two $\frac{3}{4}$ piece plus $\frac{2}{3}$ of another match the length of two whole pieces.

11

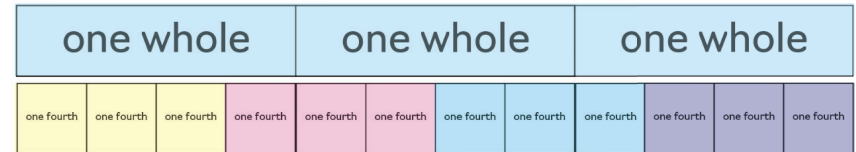
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$3 \div \frac{3}{4} = ?$$

Write the question:
How many $\frac{3}{4}$ pieces are as long as 3?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Three divided by $\frac{3}{4}$ is 4.

The first three $\frac{1}{4}$ pieces are yellow to show that added together they make three-fourths. Each $\frac{3}{4}$ piece is a different color. There were no remainders.

The quotient tells how many three-fourth sized pieces are the same length as 3.
The answer is that four $\frac{3}{4}$ pieces match the length of three whole pieces.

12

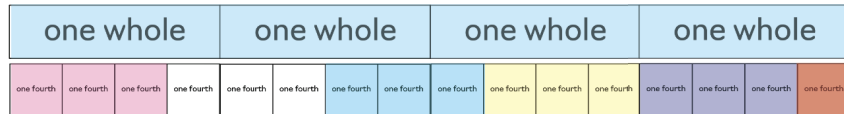
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$4 \div \frac{3}{4} = ?$$

Write the question:
How many $\frac{3}{4}$ pieces are as long as 4?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

4 divided by $\frac{3}{4}$ is $5\frac{1}{3}$.

The first three $\frac{1}{4}$ pieces are pink to show that added together they make three-fourths. There was one $\frac{1}{4}$ piece left over. Each $\frac{1}{4}$ piece is one of three equal pieces. So, one-fourth is one-third of $\frac{3}{4}$.

The quotient tells how many three-fourth sized pieces are the same length as 4.
The answer is that five $\frac{3}{4}$ pieces plus $\frac{1}{3}$ of another match the length of 4 whole pieces.

13

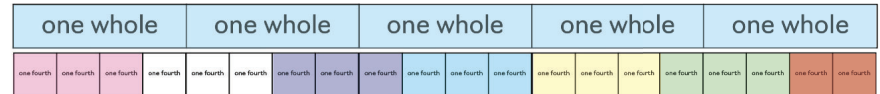
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Whole Numbers Divided by Proper Fractions

name: Answer Key

$$5 \div \frac{3}{4} = ?$$

Write the question:
How many $\frac{3}{4}$ pieces are as long as 5?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

5 divided by $\frac{3}{4}$ is $6\frac{2}{3}$.

The first three $\frac{1}{4}$ pieces are pink to show that added together they make three-fourths. The rest of the $\frac{3}{4}$ pieces were different colors. There were two-fourths left over. Each $\frac{1}{4}$ piece is one of three equal pieces. So, two-fourths is two-thirds of $\frac{3}{4}$.

The quotient tells how many three-fourth sized pieces are the same length as 5.
The answer is that six $\frac{3}{4}$ pieces plus $\frac{2}{3}$ of another match the length of 5 whole pieces.

14

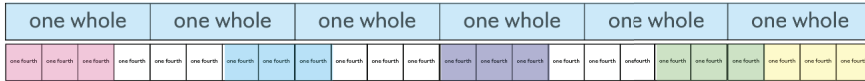
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Whole Numbers Divided by Proper Fractions

name: **Answer Key**

$$6 \div \frac{3}{4} = ?$$

Write the question:
How many $\frac{3}{4}$ pieces are as long as 6?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

6 divided by $\frac{3}{4}$ is 8.

The first three $\frac{1}{4}$ pieces are pink to show that added together they make three-fourths. None of the $\frac{3}{4}$ pieces are the same color as neighboring pieces.

The quotient tells how many three-fourth sized pieces are the same length as 6
The answer is that eight $\frac{3}{4}$ pieces match the length of 6 whole pieces.

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Whole Numbers Divided by Proper Fractions

name: **Answer Key**

$$7 \div \frac{3}{4} = ?$$

Write the question:
How many $\frac{3}{4}$ pieces are as long as 7?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Seven divided by $\frac{3}{4}$ is $9\frac{1}{4}$.

The first three $\frac{1}{4}$ pieces are pink to show that added together they make three-fourths. None of the $\frac{3}{4}$ pieces were the same color as the pieces next to them. There was one-fourth left over. Each $\frac{1}{4}$ unit fraction is one of three equal pieces. So, one-fourth is one-third of $\frac{3}{4}$.

The quotient tells how many three-fourth sized pieces are the same length as 7.
The answer is that nine $\frac{3}{4}$ pieces plus $\frac{1}{3}$ of another match the length of 7 whole pieces.

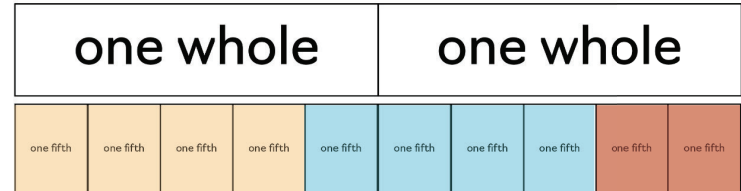
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Whole Numbers Divided by Proper Fractions

name: **Answer Key**

$$2 \div \frac{4}{5} = ?$$

Write the question:
How many $\frac{4}{5}$ pieces are as long as 2?



Color the whole numbers light blue.
Make each fraction that is the size of the divisor a different color. The numerator tells how many unit fractions are in the divisor and should be the same color. Use red if there is a part of the divisor remaining.

Explain how you found the quotient, and what the quotient means.

Two divided by $\frac{4}{5}$ is 2 and $\frac{2}{5}$.

The first four $\frac{1}{5}$ pieces are amber to show that added together they make four-fifths. There were two-fifths left over. Each $\frac{1}{5}$ piece is one of four equal pieces. So, two-fifths is half of four-fifths.

The quotient tells how many $\frac{4}{5}$ sized pieces are the same length as two.
The answer is that two $\frac{4}{5}$ pieces plus $\frac{1}{2}$ of another match the length of two whole pieces.

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