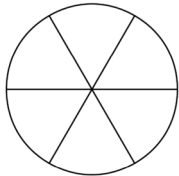


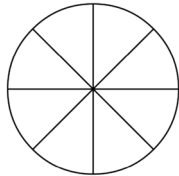
**Master 8.21**

**Step-by-Step 1**

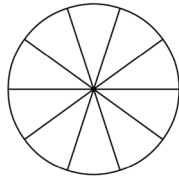
**Lesson 1, Question 5**



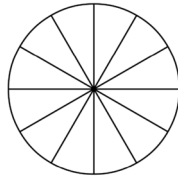
Rhonda



Apak



Kayla



Sunil

**Step 1** In each pizza above, shade the amount that each person ate:

Rhonda: 3 pieces

Apak: 4 pieces

Kayla: 5 pieces

Sunil: 6 pieces

**Step 2** What fraction of each pizza is shaded?

Rhonda: \_\_\_\_\_

Apak: \_\_\_\_\_

Kayla: \_\_\_\_\_

Sunil: \_\_\_\_\_

**Step 3** How do the fractions in *Step 2* compare? How do you know?

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**Step 4** Who's correct—Sunil, who says he ate the most, or Rhonda, who says everyone ate the same amount? Explain.

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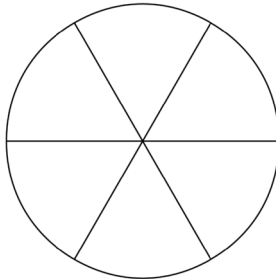
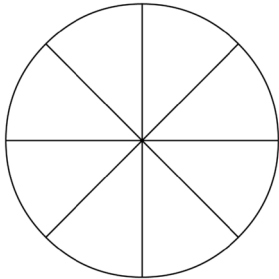


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Master 8.22

**Step-by-Step 2**

**Lesson 2, Question 6**



**Step 1** How many eighths are in  $\frac{1}{2}$  a pie? \_\_\_\_\_

In a whole pie? \_\_\_\_\_

Write 3 fractions, with denominator 8, that are greater than  $\frac{1}{2}$  but less than 1. \_\_\_\_\_

**Step 2** How many sixths are in  $\frac{1}{2}$  a pie? \_\_\_\_\_

In a whole pie? \_\_\_\_\_

Write 2 fractions, with denominator 6, that are greater than  $\frac{1}{2}$  but less than 1. \_\_\_\_\_

**Step 3** After the party, more than  $2\frac{1}{2}$  but less than 3 pies were left.

Look at your answers to *Steps 1* and *2*.

How much pie might have been left? \_\_\_\_\_

## Master 8.23

**Step-by-Step 3****Lesson 3, Question 7**

**Step 1** A quilt has 20 patches.  $\frac{1}{4}$  of the patches are yellow.

Use patterns to find equivalent fractions:

$$\frac{1}{4} = \frac{2}{8} = \frac{\square}{12} = \frac{\square}{16} = \frac{\square}{20}$$

How many patches out of 20 are yellow? \_\_\_\_\_

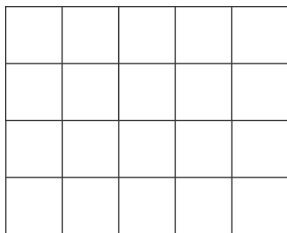
**Step 2**  $\frac{3}{5}$  of the patches are green.

Use patterns to find equivalent fractions:

$$\frac{3}{5} = \frac{\square}{10} = \frac{\square}{15} = \frac{\square}{20}$$

How many patches out of 20 are green? \_\_\_\_\_

**Step 3** Colour the patches on the quilt.



**Step 4** Colour the rest of the patches red.

How many patches are red? \_\_\_\_\_

**Step 5** What colour are the greatest number of patches? \_\_\_\_\_

What colour are the least number of patches? \_\_\_\_\_

**Step-by-Step 4****Lesson 4, Question 8**

**Step 1** Choose a decimal less than 0.45. \_\_\_\_\_

**Step 2** Think subtraction.

Subtract your decimal from 0.45 to get the missing number.

$$0.45 - \underline{\quad} = \underline{\quad}$$

**Step 3** Write each decimal from *Steps 1* and *2* as a fraction.

\_\_\_\_\_

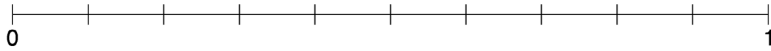
**Step 4** Repeat *Steps 1* to *3*, choosing a different decimal in *Step 1*.

\_\_\_\_\_

**Master 8.25**

**Step-by-Step 5**

**Lesson 5, Question 4**



**Step 1** How many equal parts are there on the number line above? \_\_\_\_\_

Label  $\frac{7}{10}$  on the number line.

**Step 2** What is  $\frac{4}{5}$  equivalent to?  $\frac{4}{5} = \frac{\square}{10}$

**Step 3** Label  $\frac{4}{5}$  on the number line above.

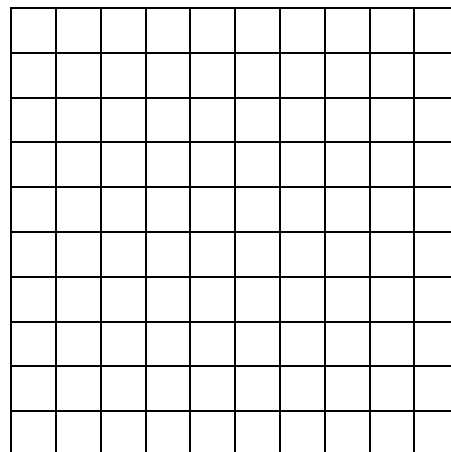
**Step 4** Mark the benchmarks 0.25, 0.5, and 0.75 on the number line.

Which benchmark is closest to  $\frac{7}{10}$  and  $\frac{4}{5}$ ? \_\_\_\_\_

**Step 5** Shade  $\frac{7}{10}$  on a hundredths grid. How many more squares do you need to shade to cover  $\frac{4}{5}$  of your grid? Colour these squares with a different colour.

$\frac{7}{10} = \frac{\square}{100}$  and  $\frac{4}{5} = \frac{\square}{100}$

Write 5 fractions with denominator 100 that fall between  $\frac{7}{10}$  and  $\frac{4}{5}$ .



**Step 6** Write each of these fractions as a decimal.

\_\_\_\_\_

## Master 8.26

**Step-by-Step 6****Lesson 6, Question 6**

These are special fractions for eighths:  $\frac{48}{8}$ ,  $\frac{56}{8}$ ,  $\frac{64}{8}$ ,  $\frac{72}{8}$

**Step 1** Write each of the fractions above as a division statement.

$$\frac{48}{8} = \underline{\quad} \div \underline{\quad}$$

$$\frac{56}{8} = \underline{\quad} \div \underline{\quad}$$

$$\frac{64}{8} = \underline{\quad} \div \underline{\quad}$$

$$\frac{72}{8} = \underline{\quad} \div \underline{\quad}$$

**Step 2** Find the quotient for each division statement in *Step 1*.

---

**Step 3** What do you notice about all the answers in *Step 2*?

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**Step 4** Explain why you think the fractions are special.

---

**Step 5** Now look at the special fractions for twelfths. Think of the multiplication facts for 12. Fill in the missing boxes.

$$\square \div 12 = 1; \text{ this special fraction is } \frac{\square}{12}.$$

$$\square \div 12 = 2; \text{ this special fraction is } \frac{\square}{12}.$$

**Step 6** Find 2 more special fractions for twelfths.

---

## Master 8.27

**Step-by-Step 7****Lesson 7, Question 8****Step 1** Estimate  $9.47 \times 5$ .

Round 9.47 to the nearest whole number. \_\_\_\_\_

**Step 2** Multiply your answer for *Step 1* by 5. \_\_\_\_\_**Step 3** Is 9.47 greater than or less than its rounded number? \_\_\_\_\_**Step 4** Is  $9.47 \times 5$  greater than or less than 45? \_\_\_\_\_

How do you know? \_\_\_\_\_

\_\_\_\_\_

**Step 5** Estimate  $23.86 \div 4$ .

Round 23.86 to a number compatible with 4. \_\_\_\_\_

**Step 6** Divide your answer for *Step 5* by 4. \_\_\_\_\_**Step 7** Is 23.86 greater than or less than its rounded number? \_\_\_\_\_**Step 8** Is  $23.86 \div 4$  greater than or less than 6? \_\_\_\_\_

How do you know? \_\_\_\_\_

## Step-by-Step 8

### Lesson 7, Question 8

**Step 1** How many gifts does Jakob have? \_\_\_\_\_

How much ribbon does he need for each gift? \_\_\_\_\_

**Step 2** Write a multiplication sentence to show how much ribbon Jakob needs.

\_\_\_\_\_

**Step 3** Use Base Ten Blocks on a place-value mat.  
Model the multiplication.

**Step 4** How many ones are on the mat? \_\_\_\_\_

How many tenths? \_\_\_\_\_

**Step 5** Trade 20 tenths for 2 ones.

How many ones are there now \_\_\_\_\_

How many tenths? \_\_\_\_\_

How much ribbon does Jakob need? \_\_\_\_\_

**Step 6** How much ribbon did Jakob buy? \_\_\_\_\_

**Step 7** Compare the amount of ribbon Jakob bought with your answer in *Step 5*.

Does Jakob have enough ribbon? \_\_\_\_\_

How do you know? \_\_\_\_\_

\_\_\_\_\_



## Master 8.29

**Step-by-Step 9****Lesson 9, Question 6****Step 1** To estimate  $2.49 \times 7$ :Find  $2 \times 7$ . \_\_\_\_\_ Find  $3 \times 7$ . \_\_\_\_\_What is a good estimate for  $2.49 \times 7$ ? \_\_\_\_\_**Step 2** Estimate each product.  
Show how you made the estimate. $3.73 \times 4$  \_\_\_\_\_  
\_\_\_\_\_ $5.08 \times 3$  \_\_\_\_\_  
\_\_\_\_\_ $8.2 \times 2$  \_\_\_\_\_  
\_\_\_\_\_**Step 3** Show whether each product is greater than ( $>$ ) or less than ( $<$ ) 15.

$2.49 \times 7$   15

$5.08 \times 3$   15

$3.73 \times 4$   15

$8.2 \times 2$   15

## Step-by-Step 11

### Lesson 11, Question 6

**Step 1** How many days in a week does Olav walk to work? \_\_\_\_\_

How many one-way trips does Olav make each day? \_\_\_\_\_

**Step 2** Use your answers in *Step 1*.

Write a multiplication sentence to show how many one-way trips Olav makes each week.

\_\_\_\_\_

**Step 3** How many kilometres does Olav walk a week? \_\_\_\_\_

Divide this number by the number of one-way trips Olav makes each week.

\_\_\_\_\_

**Step 4** How far is 1 one-way trip? \_\_\_\_\_

How far does Olav live from his workplace? \_\_\_\_\_

**Step-by-Step 12****Lesson 12, Question 5**

**Step 1** How much does the tripod cost? \_\_\_\_\_

How many people are sharing the cost? \_\_\_\_\_

Write a division statement to find how much each person will pay.

---

**Step 2** Use a calculator to divide.

How much will each person pay? \_\_\_\_\_

**Step 3** How much is the discount? \_\_\_\_\_

Subtract the discount from the original cost.

$\$89.46 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

What is the new cost of the tripod? \_\_\_\_\_

**Step 4** Use your answer from *Step 3*.

Write a new division statement to show how much each person will pay.

---

Use a calculator to divide.

How much did each person pay? \_\_\_\_\_