

Distance Learning Week 1- Math

March 23-27

Dear Parents and Students,

Attached to this cover letter you will find assignments for the week of March 23-27, 2020. This packet will be due on Monday, March 30, 2020. Please do not return the packet before March 30th. We will not have a bin out in front of the school for collection before Monday. You can either return it to the school or scan the material and email it to your Math teacher. Each assignment is labeled at the top of the page.

These assignments will be checked for completion. We encourage you to have your child complete this packet independently. All of the material that is covered in this packet has already been taught in class. This is review material. When your child is finished, you can go over the answers with your child using the answer key that is provided.

If you have any questions, please do not hesitate to contact your Math teachers via email.

We miss our students, and we hope that everyone is staying safe and healthy!

Sincerely,

4th Grade Teachers J

- Don't forget to practice on Imagine Math and Study Island. You can work on Standard 4.NF.1. (Log in to both through Clever)

Supplemental/Videos

MATH

Khan Academy - www.khanacademy.org

Type "4nf1" in the search bar

Video 1: "Equivalent fraction video"

Video 2: "Equivalent fraction practice"

Type "4nf2" in the search bar

Video 1: "Comparing Fractions: Fraction Models"

Study Jams - www.studyjams.scholastic.com

Choose Math

Choose Topic: Fractions

Video 1: "Fractions"

Video 2: "Equivalent Fractions"

Video 3: "Simplest Form"

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Supplemental Websites

- www.coolsciencelab.com/math_magician
- www.khanacademy.com
- www.coolmath4kids.com/quizzes/multiplication
- www.multiplication.com
- www.math-drills.com
- www.mathfactcafe.com
- <http://extramath.org>
- www.clever.com
- www.brainpop.com

username MannsdaleUpper

password MUESmavs2020

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Supplemental Websites

👉 <https://www.abcmouse.com/Redeem> for Early Learning Academy (for children Preschool Through 2nd Grade)

👉 <https://www.readingiq.com/redeem/> for Reading IQ (for children in Preschool through 6th Grade)

👉 <https://www.adventureacademy.com/redeem/> for Adventure Academy (for Children in 3rd through 8th Grade)

Hello,

To help families across the U.S. whose schools are closed in these difficult times, Age of Learning is working with our school and district to provide **free home access** to ABCmouse *Early Learning Academy*, Adventure Academy, and ReadingIQ during the period of the closure. These leading digital education programs include valuable educational content for Pre-K, elementary, and middle school students.

Interruptions in learning due to school closures can be a challenge for children's academic growth and development, and their need for stability and consistency. When in-school learning isn't possible, using research-based learning resources at home can help children stay engaged, provide them valuable learning experiences, and maintain some continuity in their lives.

By visiting the links below and entering your code, you will have free home access to these digital programs on computers, tablets, and smartphones during the period of closure. ABCmouse and Adventure Academy are used while connected to the internet. ReadingIQ can be used in offline mode once your account is created and books are downloaded on to a device. These programs can also be accessed using your free account at public libraries and other public locations with Internet-connectivity.

Redeem Code: SCHOOL4855

(This code will work for all 3 products.)

For Children in Preschool Through 2nd Grade

ABCMouse, *Early Learning Academy*: Please visit www.ABCmouse.com/redeem and redeem your access code.

familyfriendlyashville.com

For Children in Preschool through 6th Grade

ReadingIQ: Please visit www.ReadingIQ.com/redeem and redeem your access code.

For Children in 3rd Through 8th Grade

Adventure Academy: Please visit www.AdventureAcademy.com/redeem and redeem your access code.

Should you need assistance redeeming this code or have questions about any of the products, please direct them to the Age of Learning Customer Support team at support@aofl.com and they will be happy to help.

You can find more information on these programs by visiting www.AgeofLearning.com/programs.

Distance Learning Week 1

March 23-27

Day 1:

1. **Spiral Review:** Week 1 Distance Learning. Please complete problems 1-4. Work out the problems in the box.
2. **Problem of the Day:** Complete the problem of the day for Monday. Please work out the problem and show work.
3. **Practice Lesson:** Use Models to Find Equivalent Fractions: Use provided models to write equivalent fractions. You will need to divide the parts of the 2nd model to make an equivalent fraction. Show work.
4. **Mastery Connect:** Login to Mastery Connect through Clever. Select on the assignment titled "Intro: Using Models to Find Equivalent Fractions: Quick Check #1. Please make sure to work out each problem.

Day 2:

1. **Spiral Review:** Week 1 Distance Learning. Please complete problems 5-8. Work out problems in the box.
2. **Problem of the Day:** Complete the problem of the day for Tuesday. Please work out the problem and show work.
3. **Practice Lesson:** Use Models to Find Equivalent Fractions- More Practice: Problems 1-8 Use models to write equivalent fractions. Problems 9-12 Determine if the fractions are equivalent by shading in the models. Write the correct symbol in the circle. Show work.
4. **Mastery Connect:** Login to Mastery Connect through Clever. Select on the assignment titled "Equivalent Fractions Using Models: Quick Check #2. Please make sure to work out each problem.

Day 3:

1. **Spiral Review:** Week 1 Distance Learning. Please complete problems 9-12. Work out problems in the box.
2. **Problem of the Day:** Complete the problem of the day for Wednesday. Please work out the problem and show work.
3. **Practice Lesson:** Generate Equivalent Fractions. Problems 1-6 Write two equivalent fractions for each of the given fractions. 7-9 Determine if the fractions are equivalent. Write the correct symbol in the circle. Show work.
4. **Mastery Connect:** Login to Mastery Connect through Clever. Select on the assignment titled "Generating Equivalent Fractions: Quick Check #2. Please make sure to work out each problem.

Distance Learning Week 1

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Day 4:

1. **Spiral Review:** Week 1 Distance Learning. Please complete problems 13-16. Work out the problems in the box.
2. **Problem of the Day:** Complete the problem of the day for Thursday. Please work out the problem and show work.
3. **Practice Lesson:** Equivalent Fractions with Missing Values. Fill in the missing value for problems 1-8 to make both fractions equivalent. 9-10 Read the word problems. Solve the problems accordingly. Show work.
4. **Mastery Connect:** Login to Mastery Connect through Clever. Select on the assignment titled "Equivalent Fractions with Missing Values: Quick Check #4". Please make sure to work out each problem.

Day 5:

1. **Problem of the Day:** Complete the problem of the day for Friday. Please work out the problem and show work.
2. **Practice Lesson:** Put It All Together: Problems 1-3 Fill in the first model to represent the fraction given. Then, write an equivalent fraction. Prove it with a model. Problems 4-7 Determine if the Fractions are Equivalent. Problems 8-11 Fill in the missing value to make both fraction equivalent. Problems 12 and 13 Read the word problems. Solve the problems accordingly. Show work.
3. **Mastery Connect:** Login to Mastery Connect through Clever. Select on the assignment titled "Put It All Together: Quick Check #5." Please make sure to work out each problem.

1. Write the equation.

Bria has piece of ribbon 3 feet long to tie a bow on a birthday present. She needs twice as much ribbon. How much does she need?

2.

$$\begin{array}{r} 16 \\ \times 3 \\ \hline \end{array}$$

3. Name three numbers that are multiples of 2 and 4.

4. Model how to add

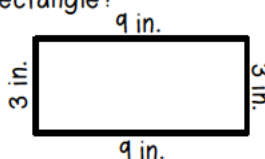
$$\frac{1}{8} + \frac{3}{8}$$

5.

$$3 \overline{)39}$$

6. How many times larger is 5,000 than 5?

7. What is the area and perimeter of the rectangle?



Area: _____

Perimeter: _____

8.

$$\begin{array}{r} 23 \\ \times 5 \\ \hline \end{array}$$

9. Add the fractions.

$$\frac{1}{6} + \frac{1}{6}$$

10. Compare the two fractions by showing $>$, $=$, $<$. (If the denominator is the same, compare the numerators. The larger the numerator, the larger the fraction.)

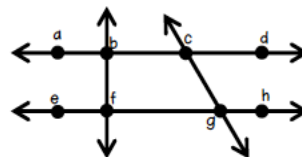
$$\frac{3}{9} \bigcirc \frac{6}{9}$$

*Bonus: Reduce the fraction.

11. Write the equation.

Rachel bought a paperback book for \$6. She bought a hardback book for three times as much as the paperback book. How much was the hardback book?

12. Use the diagram.



Name two perpendicular lines.

13. Which of these numbers is a prime number?

4, 5, 8, 10

14. How many times larger is 90,000 than 9?

15. Complete the table.

polygon	sides
triangle	
square	
pentagon	
hexagon	

16. Compare the two fractions by showing $>$, $=$, $<$.

$$\frac{2}{7} \bigcirc \frac{4}{7}$$

Math Problem of the Day

Week
1

Monday

Frank wanted to solve a problem without a remainder. He wrote down 372 divided by 3. Is he correct? Explain.

Work space:

Tuesday

Mrs. Pearson has 5 buckets of water. Each bucket is $\frac{4}{6}$ full. How much water does she have in all? Write your answer as an improper fraction and mixed number.

Work space:

Wednesday

Mrs. Winchester has 38 hundreds and 9 tens. Mrs. Will has 25 hundreds and 14 tens. Who has the most? Explain.

Work space:

Thursday

Devin has 2 bottles of soda. One bottle is $\frac{3}{10}$ full, and the other bottle is $\frac{24}{100}$ full. Write a fraction that shows how much soda he has altogether.

Work space:

Friday

Two students wrote down the number 48. Marcy said it's prime and Dan said it's composite. Who do you agree with? Explain.

Work space:

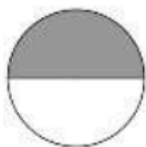
Day 1

Use Models to Find Equivalent Fractions

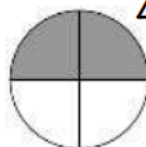
A fraction can have many different names. Fractions that name the same amount are called equivalent fractions.

Example: Let's find some fractions that are equivalent to $\frac{1}{2}$.

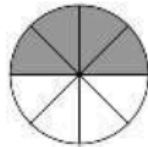
Step 1: Draw a model to represent $\frac{1}{2}$.



Step 1



Step 2



Step 3

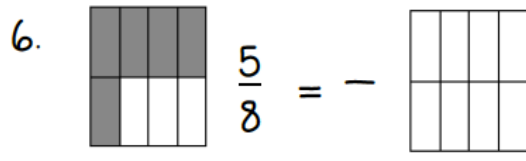
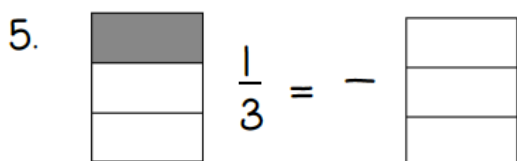
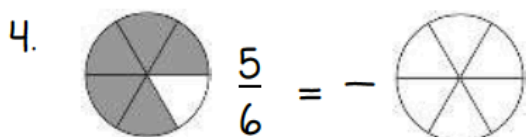
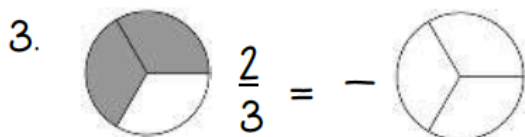
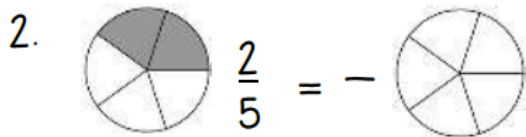
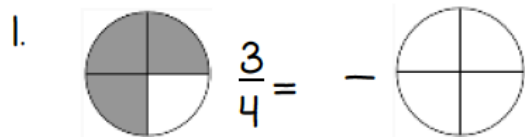
Step 2: Divide each half in half.

So, $\frac{1}{2}$ is equivalent to $\frac{2}{4}$. Both fractions name the same amount.

Step 3: Divide each part from Step 2 in half again.

So, $\frac{1}{2}$ is also equivalent to $\frac{4}{8}$, and $\frac{2}{4}$ is equivalent to $\frac{4}{8}$.

Use the models below to write an equivalent fraction. You will need to divide the parts of the second model to make an equivalent fraction.



Intro: Using Models to Find Equivalent Fractions: Quick Check #1

mastery correct

1.

Mindy shaded in the rectangle below to represent a fraction.

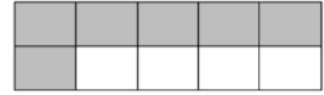


Which rectangular figure is equivalent to Mindy's shaded diagram?

-
-
-
-

2.

Study this figure.

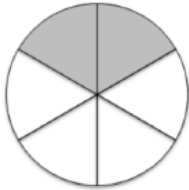


What fraction of the figure is shaded?

- $\frac{3}{5}$
- $\frac{7}{10}$
- $\frac{7}{12}$
- $\frac{3}{4}$

3.

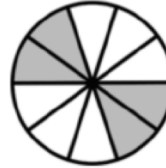
What fraction of the circle is shaded?



- $\frac{1}{6}$
- $\frac{1}{3}$
- $\frac{2}{4}$
- $\frac{4}{6}$

4.

A circle is divided into 10 equal parts, as shown.

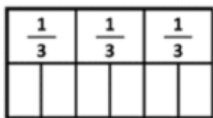


Which equivalent fraction represents the shaded portion of the circle?

- $\frac{2}{5}$
- $\frac{3}{5}$
- $\frac{2}{3}$
- $\frac{5}{2}$

5.

Use the model to find equivalent fractions. Which fraction equals $\frac{1}{3}$?



- $\frac{1}{6}$
- $\frac{2}{6}$
- $\frac{3}{6}$
- $\frac{4}{6}$

6.

Which model shows $\frac{1}{2}$ shaded?

-
-
-
-

7.

Heather shaded in the circle below to represent a fraction.



Which rectangular figure is equivalent to Heather's shaded diagram?

-
-
-
-

8.

Alan shaded in part of the circle figure.



Which diagram is shaded to show a fraction equivalent to Alan's circle?

-
-
-
-

9.

A fraction of the rectangle is shaded.



Which other rectangle has an equivalent fraction of shaded area?

-
-
-
-

10.

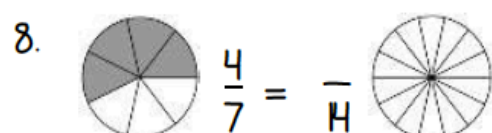
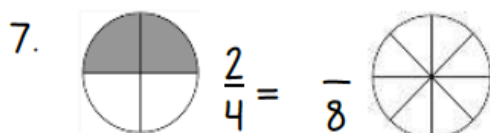
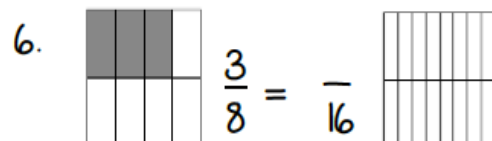
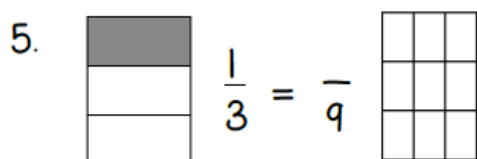
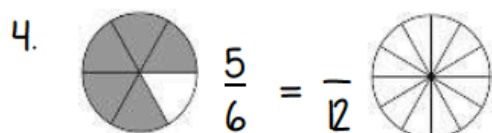
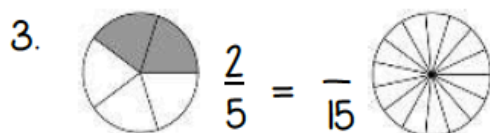
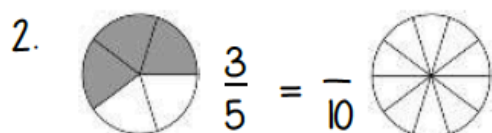
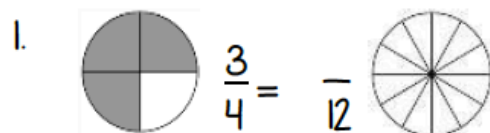
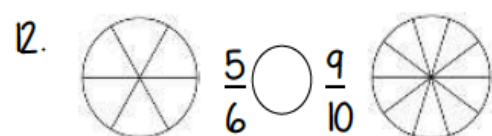
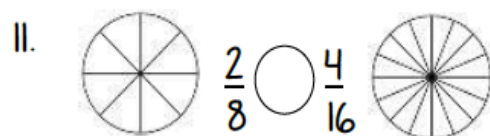
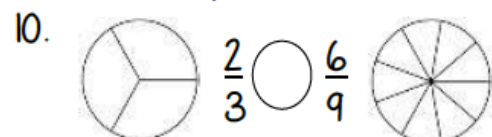
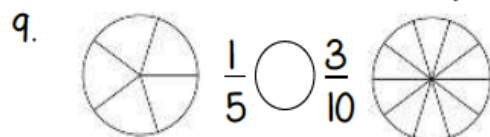
Which of these shapes shows a fraction equivalent to $\frac{4}{8}$?

-
-
-
-

Day 2

Use Models to Find Equivalent Fractions
More Practice

Use the models below to write an equivalent fraction.

Are the fractions below equivalent? Prove it with a picture. Write = or \neq .

Equivalent Fractions Using Models: Quick Check #2

mastery connect

1. Which model shows $\frac{3}{4}$ shaded?

-
-
-
-

3. Study the fraction model.



Which two expressions are equivalent to the fraction model?

- $\frac{3}{10} + \frac{3}{10}$
- $\frac{1}{5} + \frac{1}{5}$
- $\frac{2}{10} + \frac{1}{10} + \frac{1}{10}$
- $\frac{3}{5} + \frac{2}{5}$
- $\frac{2}{4} + \frac{2}{4}$

2. The shaded area of the model represents a fraction.



Which model has a shaded area that represents an equal fraction?

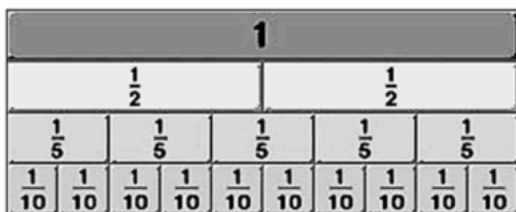
-
-
-

4. Which fraction models have a shaded area equivalent to $\frac{6}{10}$?

Select two (2) that apply.

-
-
-
-

5. Carter is looking at a diagram in his math textbook.

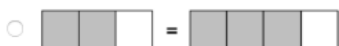
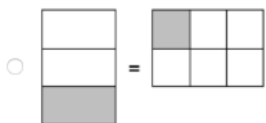


Which statement is true according to the diagram?

- $\frac{3}{10} = \frac{1}{5}$
- $\frac{3}{5} = \frac{1}{2}$
- $\frac{1}{2} = \frac{5}{10}$
- $\frac{6}{10} = \frac{2}{5}$

6.

Which shaded models represent equivalent fractions?



7.

The fraction bar represents one whole.



Which fraction is equivalent to the shaded area of the fraction bar?

$\frac{9}{10}$

$\frac{4}{5}$

$\frac{7}{10}$

$\frac{3}{5}$

8.

Study the fraction model.



Which fraction is equivalent to the shaded area of the model?

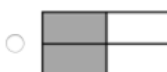
$\frac{1}{2}$

$\frac{6}{10}$

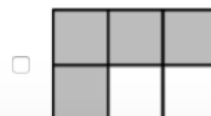
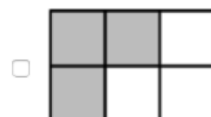
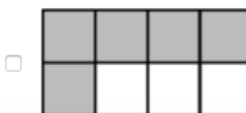
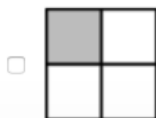
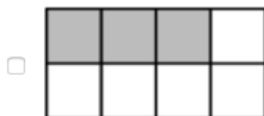
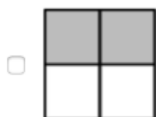
$\frac{8}{12}$

$\frac{3}{4}$

9.

The fraction $\frac{2}{5}$ is represented by the figure shown.Which figure is equivalent to $\frac{2}{5}$?

10.

Which two fraction models have a shaded area equal to $\frac{1}{2}$?

Day 3

Generate Equivalent Fractions

To generate equivalent fractions without drawing a model, multiply the numerator and denominator of a fraction by the same number.

Examples: $\frac{2}{3} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{4}{6}$ $\frac{2}{3} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{6}{9}$ $\frac{3}{10} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{9}{30}$ $\frac{3}{10} \frac{\boxed{\times 5}}{\boxed{\times 5}} = \frac{15}{50}$

Write two equivalent fractions for each fraction below.

1. $\frac{1}{2} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

2. $\frac{3}{5} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

3. $\frac{5}{6} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

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

$\frac{3}{5} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

$\frac{5}{6} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

4. $\frac{7}{8} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

5. $\frac{1}{3} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

6. $\frac{3}{4} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

$\frac{7}{8} \frac{\boxed{}}{\boxed{}} = \frac{}{}$

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

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

Are the fractions below equivalent? Write = or \neq .

(HINT: Have the numerator and denominator been multiplied by the same number?)

7. $\frac{2}{3} \bigcirc \frac{8}{12}$

8. $\frac{3}{6} \bigcirc \frac{6}{9}$

9. $\frac{5}{7} \bigcirc \frac{15}{21}$

Generating Equivalent Fractions: Quick Check #3

mastery connect

1.

Which pair of fractions is equivalent to $\frac{3}{4}$?

- $\frac{4}{12}, \frac{2}{4}$
- $\frac{4}{3}, \frac{7}{4}$
- $\frac{6}{8}, \frac{9}{12}$
- $\frac{2}{4}, \frac{3}{6}$

2.

Which two fractions are equivalent to $\frac{9}{12}$?

- $\frac{2}{4}$
- $\frac{3}{6}$
- $\frac{3}{4}$
- $\frac{6}{8}$
- $\frac{4}{3}$

3.

Which fraction is equivalent to $\frac{2}{3}$?

- $\frac{1}{3}$
- $\frac{2}{6}$
- $\frac{4}{6}$
- $\frac{4}{3}$

4.

Which fraction has the same value as $\frac{1}{4}$?

- $\frac{4}{18}$
- $\frac{6}{24}$
- $\frac{3}{8}$
- $\frac{16}{4}$

5.

Which fraction shown is equivalent to $\frac{3}{4}$?

- $\frac{4}{8}$
- $\frac{6}{8}$
- $\frac{5}{10}$
- $\frac{8}{3}$

6.

Lisa and her dad had pizza for lunch. The pizza was cut into 8 equal slices. Lisa ate 2 slices of pizza.

What fraction of the pizza did Lisa eat?

- $\frac{1}{2}$
- $\frac{1}{4}$
- $\frac{1}{6}$
- $\frac{1}{8}$

7.

Lisa and her dad had pizza for lunch. The pizza was cut into 8 equal slices. Lisa's dad ate 4 slices of pizza.

What fraction of the pizza did Lisa's dad eat?

- $\frac{1}{2}$
- $\frac{1}{3}$
- $\frac{1}{4}$
- $\frac{1}{8}$

8.

Which fraction is equivalent to $\frac{2}{5}$?

- $\frac{2}{10}$
- $\frac{4}{10}$
- $\frac{4}{5}$
- $\frac{5}{2}$

9.

Which fractions are equivalent to $\frac{2}{3}$?

- $\frac{4}{6}$ and $\frac{8}{10}$
- $\frac{6}{8}$ and $\frac{8}{12}$
- $\frac{8}{12}$ and $\frac{4}{6}$
- $\frac{10}{12}$ and $\frac{6}{8}$

10.

Which set of fractions is equal?

- $\frac{1}{2} = \frac{6}{14}$
- $\frac{1}{3} = \frac{3}{6}$
- $\frac{3}{4} = \frac{6}{8}$
- $\frac{1}{6} = \frac{3}{12}$

Identify a missing value to create equivalent fractions

Day 4

Equivalent Fractions with Missing Values

What number will make these 2 fractions equal?

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

Step 1: Think: $3 \times ? = 6$. Answer: 2Step 2: If $3 \times 2 = 6$, then multiply $2 \times 2 = 4$.

$$\frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

Remember: To make an equivalent fraction, what you do to the numerator, you must do to the denominator.

Fill in the missing value to make both fractions equivalent.

1. $\frac{1}{2} = \frac{\square}{8}$

2. $\frac{3}{4} = \frac{9}{\square}$

3. $\frac{2}{5} = \frac{\square}{20}$

4. $\frac{5}{6} = \frac{10}{\square}$

5. $\frac{1}{3} = \frac{\square}{15}$

6. $\frac{7}{10} = \frac{21}{\square}$

7. $\frac{3}{8} = \frac{\square}{32}$

8. $\frac{4}{5} = \frac{40}{\square}$

9. Jeremy's pizza was cut into 6 equal slices, and he ate 4 pieces. Zachary's pizza was cut into 12 equal slices. How many pieces does Zachary need to eat so that he and Jeremy have eaten an equal amount?

*Prove it with a picture.

10. Katie has $\frac{15}{20}$ of a dollar in her pocket. Lisa has the same amount of money in her pocket. What fraction of a dollar does Lisa have in her pocket?

- A. $\frac{5}{10}$ B. $\frac{3}{4}$
C. $\frac{4}{5}$ D. $\frac{2}{10}$

Equivalent Fractions with Missing Values: Quick Check #4

mastery connect

1.

Joseph's teacher writes two fractions on the board as shown.

$$\frac{2}{4} = \frac{\square}{12}$$

Part A

Which number can Joseph use to fill the empty box and make the fractions equal?

- 2
- 4
- 6
- 8

2.

Joseph's teacher writes two fractions on the board as shown.

$$\frac{2}{4} = \frac{\square}{12}$$

Part B

Joseph's teacher now asks him to write another fraction on the board that is equal to $\frac{2}{4}$. Which fraction should Joseph write on the board?

- $\frac{5}{10}$
- $\frac{4}{10}$
- $\frac{4}{12}$
- $\frac{2}{12}$

3.

Which number can be entered into the box to make the equation true?

$$\frac{3}{4} = \frac{\square}{12}$$

- 6
- 8
- 9
- 11

4.

In what box would you place a 4 to make a true equation?

- $\frac{1}{3} = \frac{\square}{12}$
- $\frac{2}{3} = \frac{\square}{12}$
- $\frac{3}{4} = \frac{\square}{12}$
- $\frac{1}{2} = \frac{\square}{12}$

5. Consider the equation in the box.

$$\frac{6}{8} = \frac{\square}{4}$$

Which number replaces \square to make the equation true?

- 1
- 2
- 3
- 4

6. Which number will make this sentence true?

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

- 2
- 3
- 4
- 5

7. Which number can be entered into the box to make the fractions equal?

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

- 6
- 8
- 9
- 13

8. Consider the equation in the box.

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

What number replaces \square and makes the equation true?

- 1
- 2
- 4
- 8

9. In what box would you place a 6 to make a true equation?

$\frac{1}{3} = \frac{\square}{12}$

$\frac{2}{3} = \frac{\square}{12}$

$\frac{3}{4} = \frac{\square}{12}$

$\frac{1}{2} = \frac{\square}{12}$

10. In what box would you place a 9 to make a true equation?

$\frac{1}{3} = \frac{\square}{12}$

$\frac{2}{3} = \frac{\square}{12}$

$\frac{3}{4} = \frac{\square}{12}$

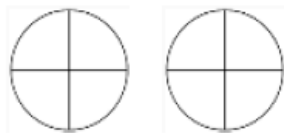
$\frac{1}{2} = \frac{\square}{12}$

Day 5

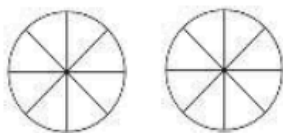
Put It All Together

Fill in the first model to represent the fraction given. Then, write an equivalent fraction for each fraction and prove it with a model.

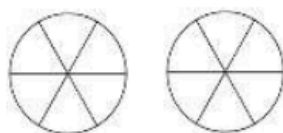
1. $\frac{1}{4} \frac{\square}{\square} = \frac{\square}{\square}$



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



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



Are the fractions below equivalent? Write = or \neq .

4. $\frac{2}{4} \bigcirc \frac{8}{12}$

5. $\frac{5}{6} \bigcirc \frac{15}{18}$

6. $\frac{3}{10} \bigcirc \frac{12}{40}$

7. $\frac{1}{8} \bigcirc \frac{3}{16}$

Fill in the missing value to make both fractions equivalent.

8. $\frac{1}{7} = \frac{\square}{28}$

9. $\frac{4}{9} = \frac{16}{\square}$

10. $\frac{3}{4} = \frac{\square}{12}$

11. $\frac{2}{5} = \frac{10}{\square}$

12. Stephanie baked a cake and cut it into 15 equal pieces. She put icing on 9 pieces. Tammy baked the same size cake and cut her cake into 5 equal pieces. How many pieces of cake should Tammy put icing on so that it is equivalent to the amount of icing on Stephanie's cake?

13. Bryan and Caden have both completed the same amount of their homework so far. If Bryan has completed $\frac{8}{12}$ of his homework, how much has Caden completed?

A. $\frac{2}{3}$

B. $\frac{3}{4}$

C. $\frac{3}{5}$

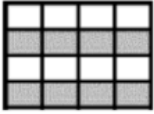
D. $\frac{2}{4}$

Put It All Together: Quick Check #5

mastery connect

1.

What fraction in, simplest form, represents the unshaded area in the grid?



- $\frac{1}{4}$
- $\frac{1}{2}$
- $\frac{4}{5}$
- $\frac{3}{4}$

2.

Alan shaded in part of the rectangular figure.



Which diagram is shaded to show a fraction equivalent to Alan's rectangle?

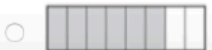


3.

Danielle drew a fraction model.

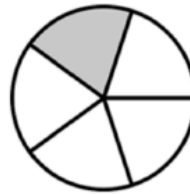


Which fraction model is equivalent to Danielle's model?



4.

The circle shown is divided into equal-size pieces.



Which fraction is equivalent to the shaded area of the circle?

$\frac{1}{6}$

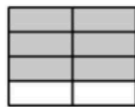
$\frac{2}{10}$

$\frac{5}{8}$

$\frac{8}{10}$

5.

Spencer shades the fraction model, as shown.



Which fraction is equivalent to the shaded area of Spencer's model?

$\frac{1}{5}$

$\frac{1}{3}$

$\frac{2}{3}$

$\frac{3}{4}$

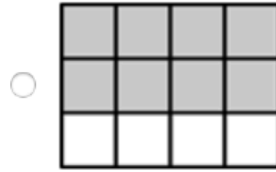
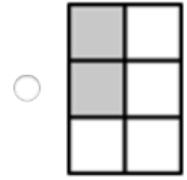
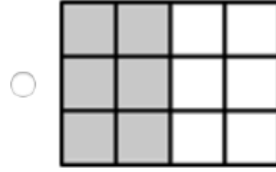
6. The shaded area of the figure represents $\frac{2}{5}$.



Which fraction is equivalent to $\frac{2}{5}$?

- $\frac{6}{9}$
- $\frac{1}{2}$
- $\frac{4}{10}$
- $\frac{1}{3}$

7. Which fraction model has a shaded area equivalent to $\frac{2}{3}$?

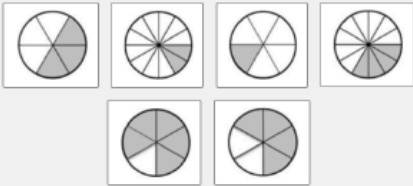


8.

Study the fraction models shown.

Drag the fraction model into the box that makes the statement true.

has a shaded area equal to $\frac{2}{6}$.



9.

Which fraction represents the unshaded square on the entire grid?



- $\frac{4}{8}$
- $\frac{12}{8}$
- $\frac{1}{3}$
- $\frac{8}{4}$

10. Jackson uses this fraction bar to find equivalent fractions.



Which fraction choice is an equivalent fraction?

- $\frac{2}{2}$
- $\frac{2}{3}$
- $\frac{4}{6}$
- $\frac{3}{6}$

KEYS

Week 1

Distance Learning

1. Write the equation.

Bria has piece of ribbon 3 feet long to tie a bow on a birthday present. She needs twice as much ribbon. How much does she need?

$$3 \times 2 = 6$$

4.OA.1 (3.OA.1)

2.

$$\begin{array}{r} 16 \\ \times 3 \\ \hline 48 \end{array}$$

4.NBT.5

3. Name three numbers that are multiples of 2 and 4.

Sample answers:

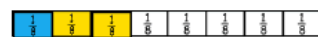
4, 8

4.OA.4 (3.OA.9)

4. Model how to add

$$\frac{1}{8} + \frac{3}{8}$$

Sample answer:



$$\frac{4}{8}$$

4.NF.3a

5.

$$\begin{array}{r} 13 \\ 3 \overline{)39} \end{array}$$

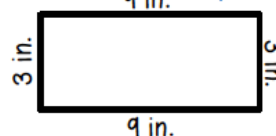
4.NBT.6

6. How many times larger is 5,000 than 5?

1,000

4.NBT.1 (3.NBT.3)

7. What is the area and perimeter of the rectangle? 4.MD.3 (3.MD.7a)



Area: 27 sq. in

Perimeter: 24 sq. in

8.

$$\begin{array}{r} 23 \\ \times 5 \\ \hline 115 \end{array}$$

4.NBT.5

9. Add the fractions.

$$\frac{1}{6} + \frac{1}{6} = \frac{2}{6}$$

*Bonus: Reduce the fraction.

4.NF.3a

$$\frac{1}{3}$$

10. Compare the two fractions by showing $>$, $=$, $<$. (If the denominator is the same, compare the numerators. The larger the numerator, the larger the fraction.)

$$\frac{3}{9} < \frac{6}{9}$$

4.NF.2 (3.NF.3b)

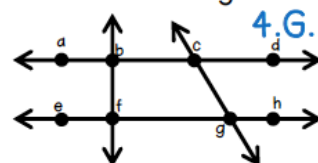
11. Write the equation.

Rachel bought a paperback book for \$6. She bought a hardback book for three times as much as the paperback book. How much as the hardback book?

$$6 \times 3 = 18$$

4.OA.1 (3.OA.1)

12. Use the diagram. 4.G.1



Name two perpendicular lines.

Sample answers:

ac and bf

13. Which of these numbers is a prime number?

4, 5, 8, 10

4.OA.4 (3.OA.9)

14. How many times larger is 90,000 than 9?

10,000

4.NBT.1 (3.NBT.3)

15. Complete the table.

polygon	sides
triangle	3
square	4
pentagon	5
hexagon	6

4.G.2

16. Compare the two fractions by showing $>$, $=$, $<$.

$$\frac{2}{7} < \frac{4}{7}$$

4.NF.2 (3.NF.3b)

Key Math Problem of the Day

Week
1

Monday

Frank wanted to solve a problem without a remainder. He wrote down 372 divided by 3. Is he correct? Explain.

Work space:

Sample Answer: Yes, 372 has 3 as a factor. I know this because using the rules of divisibility $3+7+2=12$. 12 is a multiple of 3. Therefore, 3 will be a factor.

Tuesday

Mrs. Pearson has 5 buckets of water. Each bucket is $\frac{4}{6}$ full. How much water does she have in all? Write your answer as an improper fraction and mixed number.

Work space:

$$5 \times \frac{4}{6} = \frac{20}{6} = 3 \frac{2}{3}$$

Reminder: to go from an improper fraction- divide. The quotient is the whole number. The remainder will be the numerator. The denominator stays the same.

Wednesday

Mrs. Winchester has 38 hundreds and 9 tens. Mrs. Will has 25 hundreds and 14 tens. Who has the most? Explain.

Work space:

Mrs. Winchester- 38 hundreds and 9 tens= 389

Mrs. Will- 25 hundreds and 14 tens= 390

$390 > 389$. Mrs. Will has more.

Thursday

Devin has 2 bottles of soda. One bottle is $\frac{3}{10}$ full, and the other bottle is $\frac{24}{100}$ full. Write a fraction that shows how much soda he has altogether.

Work space:

$$\frac{3}{10} + \frac{24}{100} = \frac{30}{100} + \frac{24}{100} = \frac{54}{100}$$

$$\frac{3}{10} = \frac{30}{100}$$

Friday

Two students wrote down the number 48. Marcy said it's prime and Dan said it's composite. Who do you agree with? Explain.

Work space:

Sample Answer: Dan is correct. 48 is an even number. 2 is the only even number. That means that 48 is composite and Dan is correct.

Day 1

Use Models to Find Equivalent Fractions

A fraction can have many different names. Fractions that name the same amount are called equivalent fractions.

Example: Let's find some fractions that are equivalent to $\frac{1}{2}$.

Step 1: Draw a model to represent $\frac{1}{2}$.



Step 1



Step 2



Step 3

Step 2: Divide each half in half.

So, $\frac{1}{2}$ is equivalent to $\frac{2}{4}$. Both fractions name the same amount.

Step 3: Divide each part from Step 2 in half again.

So, $\frac{1}{2}$ is also equivalent to $\frac{4}{8}$, and $\frac{2}{4}$ is equivalent to $\frac{4}{8}$.

Use the models below to write an equivalent fraction. You will need to divide the parts of the second model to make an equivalent fraction.

1. $\frac{3}{4} = \frac{6}{8}$

Answers will vary.

2. $\frac{2}{5} = \frac{4}{10}$

3. $\frac{2}{3} = \frac{4}{6}$

4. $\frac{5}{6} = \frac{10}{12}$

5. $\frac{1}{3} = \frac{2}{6}$

6. $\frac{5}{8} = \frac{10}{16}$

Intro: Using Models to Find Equivalent Fractions: Quick Check #1

mastery correct

1.

Mindy shaded in the rectangle below to represent a fraction.

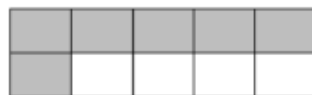


Which rectangular figure is equivalent to Mindy's shaded diagram?

-
-
-
-

2.

Study this figure.

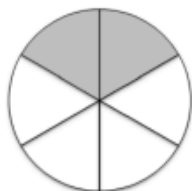


What fraction of the figure is shaded?

- $\frac{3}{5}$
- $\frac{7}{10}$
- $\frac{7}{12}$
- $\frac{3}{4}$

3.

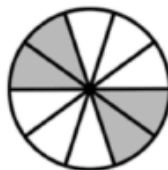
What fraction of the circle is shaded?



- $\frac{1}{6}$
- $\frac{1}{3}$
- $\frac{2}{4}$
- $\frac{4}{6}$

4.

A circle is divided into 10 equal parts, as shown.

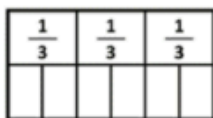


Which equivalent fraction represents the shaded portion of the circle?

- $\frac{2}{5}$
- $\frac{3}{5}$
- $\frac{3}{5}$
- $\frac{3}{5}$

5.

Use the model to find equivalent fractions. Which fraction equals $\frac{1}{3}$?



- $\frac{1}{6}$
- $\frac{2}{6}$
- $\frac{3}{6}$
- $\frac{4}{6}$

6.

Which model shows $\frac{1}{2}$ shaded?

-
-
-
-

7.

Heather shaded in the circle below to represent a fraction.



Which rectangular figure is equivalent to Heather's shaded diagram?

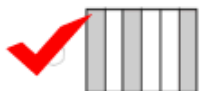


9.

A fraction of the rectangle is shaded.



Which other rectangle has an equivalent fraction of shaded area?



8.

Alan shaded in part of the circle figure.

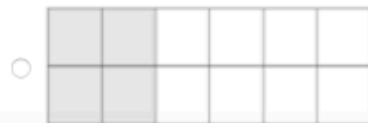
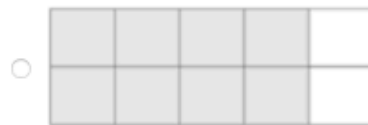
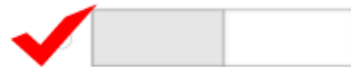


Which diagram is shaded to show a fraction equivalent to Alan's circle?



10.

Which of these shapes shows a fraction equivalent to $\frac{4}{8}$?

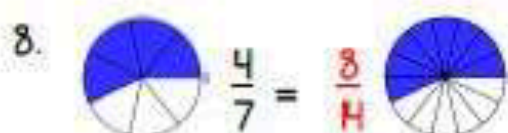
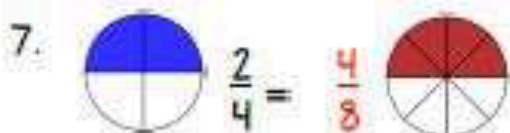
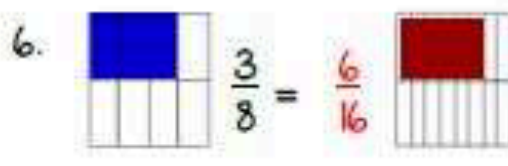
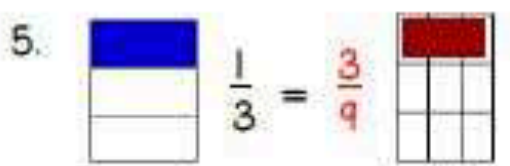
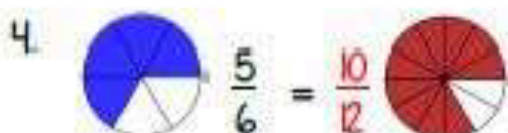
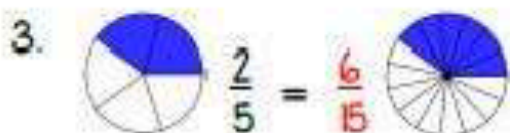
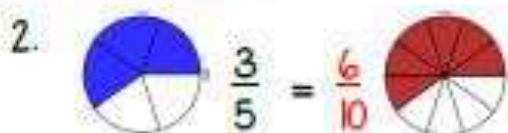
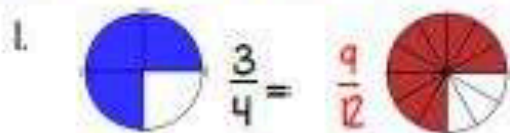
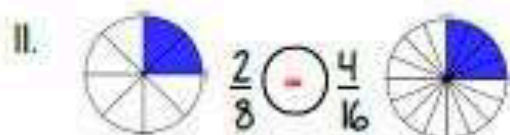


Day 2

Use Models to Find Equivalent Fractions

More Practice

Use the models below to write an equivalent fraction.

Are the fractions below equivalent? Prove it with a picture. Write = or \neq .

Equivalent Fractions Using Models: Quick Check #2

mastery connect

1. Which model shows $\frac{3}{4}$ shaded?



2. The shaded area of the model represents a fraction.



Which model has a shaded area that represents an equal fraction?



3. Study the fraction model.

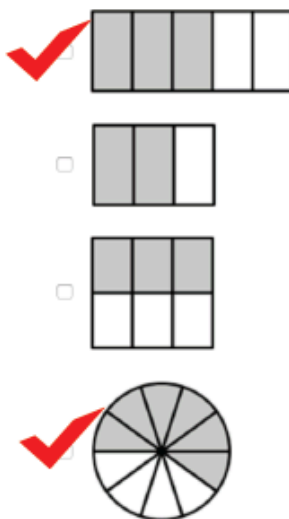


Which two expressions are equivalent to the fraction model?

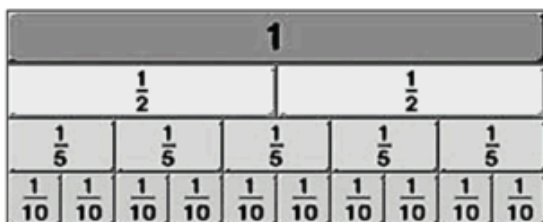
- $\frac{3}{10} + \frac{3}{10}$
 $\frac{1}{5} + \frac{1}{5}$
 $\frac{2}{10} + \frac{1}{10} + \frac{1}{10}$
 $\frac{3}{5} + \frac{2}{5}$
 $\frac{2}{4} + \frac{2}{4}$

4. Which fraction models have a shaded area equivalent to $\frac{6}{10}$?

Select two (2) that apply.



5. Carter is looking at a diagram in his math textbook.


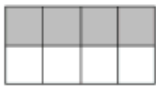


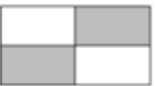

Which statement is true according to the diagram?

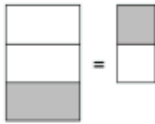
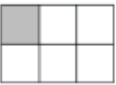
- $\frac{3}{10} = \frac{1}{5}$
 $\frac{3}{5} = \frac{1}{2}$
 $\frac{1}{2} = \frac{5}{10}$
 $\frac{6}{10} = \frac{2}{5}$



Which shaded models represent equivalent fractions?

6.

 = 

 = 

 = 

 = 

7.

The fraction bar represents one whole.



Which fraction is equivalent to the shaded area of the fraction bar?

- $\frac{9}{10}$
- $\frac{4}{5}$
- $\frac{7}{10}$
- $\frac{3}{5}$

8.

Study the fraction model.



Which fraction is equivalent to the shaded area of the model?



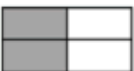

- $\frac{1}{2}$
- $\frac{6}{10}$
- $\frac{8}{12}$
- $\frac{3}{4}$

9.

The fraction $\frac{2}{5}$ is represented by the figure shown.

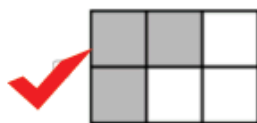
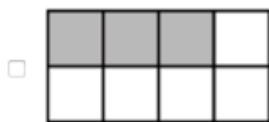


Which figure is equivalent to $\frac{2}{5}$?

- 
- 
- 
- 

10.

Which two fraction models have a shaded area equal to $\frac{1}{2}$?



Day 3

Generate Equivalent Fractions

To generate equivalent fractions without drawing a model, multiply the numerator and denominator of a fraction by the same number.

Examples: $\frac{2}{3} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{4}{6}$ $\frac{2}{3} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{6}{9}$ $\frac{3}{10} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{9}{30}$ $\frac{3}{10} \frac{\boxed{\times 5}}{\boxed{\times 5}} = \frac{15}{50}$

Write two equivalent fractions for each fraction below. *Answers will vary.*

1. $\frac{1}{2} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{2}{4}$

2. $\frac{3}{5} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{6}{10}$

3. $\frac{5}{6} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{10}{12}$

$\frac{1}{2} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{3}{6}$

$\frac{3}{5} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{9}{15}$

$\frac{5}{6} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{15}{18}$

4. $\frac{7}{8} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{14}{16}$

5. $\frac{1}{3} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{2}{6}$

6. $\frac{3}{4} \frac{\boxed{\times 2}}{\boxed{\times 2}} = \frac{6}{8}$

$\frac{7}{8} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{21}{24}$

$\frac{1}{3} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{3}{9}$

$\frac{3}{4} \frac{\boxed{\times 3}}{\boxed{\times 3}} = \frac{9}{12}$

Are the fractions below equivalent? Write = or \neq .

(HINT: Have the numerator and denominator been multiplied by the same number?)

7. $\frac{2}{3} \overset{\circ}{=} \frac{8}{12}$

8. $\frac{3}{6} \overset{\circ}{\neq} \frac{6}{9}$

9. $\frac{5}{7} \overset{\circ}{=} \frac{15}{21}$

Generating Equivalent Fractions: Quick Check #3

mastery connect

1. Which pair of fractions is equivalent to $\frac{3}{4}$?

- $\frac{4}{12}, \frac{2}{4}$
- $\frac{4}{3}, \frac{7}{4}$
- $\frac{6}{8}, \frac{9}{12}$
- $\frac{2}{4}, \frac{3}{6}$

2. Which two fractions are equivalent to $\frac{9}{12}$?

- $\frac{2}{4}$
- $\frac{3}{6}$
- $\frac{3}{4}$
- $\frac{6}{8}$
- $\frac{4}{3}$

3. Which fraction is equivalent to $\frac{2}{3}$?

- $\frac{1}{3}$
- $\frac{2}{6}$
- $\frac{4}{6}$
- $\frac{4}{3}$

4. Which fraction has the same value as $\frac{1}{4}$?

- $\frac{4}{18}$
- $\frac{6}{24}$
- $\frac{3}{8}$
- $\frac{16}{4}$

5. Which fraction shown is equivalent to $\frac{3}{4}$?

- $\frac{4}{8}$
- $\frac{6}{8}$
- $\frac{5}{10}$
- $\frac{8}{3}$

6.

Lisa and her dad had pizza for lunch. The pizza was cut into 8 equal slices. Lisa ate 2 slices of pizza.

What fraction of the pizza did Lisa eat?

$\frac{1}{2}$

$\frac{1}{4}$

$\frac{1}{6}$

$\frac{1}{8}$

7.

Lisa and her dad had pizza for lunch. The pizza was cut into 8 equal slices. Lisa's dad ate 4 slices of pizza.

What fraction of the pizza did Lisa's dad eat?

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{8}$

8.

Which fraction is equivalent to $\frac{2}{5}$?

$\frac{2}{10}$

$\frac{4}{10}$

$\frac{4}{5}$

$\frac{5}{2}$

9.

Which fractions are equivalent to $\frac{2}{3}$?

$\frac{4}{6}$ and $\frac{8}{10}$

$\frac{6}{8}$ and $\frac{8}{12}$

$\frac{8}{12}$ and $\frac{4}{6}$

$\frac{10}{12}$ and $\frac{6}{8}$

10.

Which set of fractions is equal?

$\frac{1}{2} = \frac{6}{14}$

$\frac{1}{3} = \frac{3}{6}$

$\frac{3}{4} = \frac{6}{8}$

$\frac{1}{6} = \frac{3}{12}$

Identify a missing value to create equivalent fractions

Day 4

Equivalent Fractions with Missing Values

What number will make these 2 fractions equal?

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

Step 1: Think: $3 \times ? = 6$. Answer: 2Step 2: If $3 \times 2 = 6$, then multiply $2 \times 2 = 4$.

$$\frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

Remember: To make an equivalent fraction, what you do to the numerator, you must do to the denominator.

Fill in the missing value to make both fractions equivalent.

1. $\frac{1}{2} = \frac{4}{8}$

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

3. $\frac{2}{5} = \frac{8}{20}$

4. $\frac{5}{6} = \frac{10}{12}$

5. $\frac{1}{3} = \frac{5}{15}$

6. $\frac{7}{10} = \frac{21}{30}$

7. $\frac{3}{8} = \frac{12}{32}$

8. $\frac{4}{5} = \frac{40}{50}$

9. Jeremy's pizza was cut into 6 equal slices, and he ate 4 pieces. Zachary's pizza was cut into 12 equal slices. How many pieces does Zachary need to eat so that he and Jeremy have eaten an equal amount? **8 slices**

*Prove it with a picture.



10. Katie has $\frac{15}{20}$ of a dollar in her pocket. Lisa has the same amount of money in her pocket. What fraction of a dollar does Lisa have in her pocket?

A. $\frac{5}{10}$

B. $\frac{3}{4}$

C. $\frac{4}{5}$

D. $\frac{2}{10}$

Equivalent Fractions with Missing Values: Quick Check #4

mastery correct

1.

Joseph's teacher writes two fractions on the board as shown.

$$\frac{2}{4} = \frac{\square}{12}$$

Part A

Which number can Joseph use to fill the empty box and make the fractions equal?

2

4

6

8

2.

Joseph's teacher writes two fractions on the board as shown.

$$\frac{2}{4} = \frac{\square}{12}$$

Part B

Joseph's teacher now asks him to write another fraction on the board that is equal to $\frac{2}{4}$. Which fraction should Joseph write on the board?

$\frac{5}{10}$

$\frac{4}{10}$

$\frac{4}{12}$

$\frac{2}{12}$

3.

Which number can be entered into the box to make the equation true?

$$\frac{3}{4} = \frac{\square}{12}$$

6

8

9

11

4.

In what box would you place a 4 to make a true equation?

$\frac{1}{3} = \frac{\square}{12}$

$\frac{2}{3} = \frac{\square}{12}$

$\frac{3}{4} = \frac{\square}{12}$

$\frac{1}{2} = \frac{\square}{12}$

5. Consider the equation in the box.

$$\frac{6}{8} = \frac{\square}{4}$$

Which number replaces \square to make the equation true?

1

2

3

4

6.

Which number will make this sentence true?

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

 2

 3

 4

 5

7.

Which number can be entered into the box to make the fractions equal?

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

 6

 8

 9

 13

8.

Consider the equation in the box.

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

What number replaces \square and makes the equation true?
 1

 2

 4

 8

9.

In what box would you place a 6 to make a true equation?

$\frac{1}{3} = \frac{\square}{12}$

$\frac{2}{3} = \frac{\square}{12}$

$\frac{3}{4} = \frac{\square}{12}$

$\frac{1}{2} = \frac{\square}{12}$

10.

In what box would you place a 9 to make a true equation?

$\frac{1}{3} = \frac{\square}{12}$

$\frac{2}{3} = \frac{\square}{12}$

$\frac{3}{4} = \frac{\square}{12}$

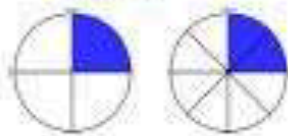
$\frac{1}{2} = \frac{\square}{12}$

Day 5

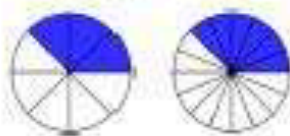
Put It All Together

Fill in the first model to represent the fraction given. Then, write an equivalent fraction for each fraction and prove it with a model.

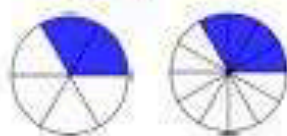
1. $\frac{1}{4} \begin{matrix} \boxed{\times 2} \\ \boxed{\times 2} \end{matrix} = \frac{2}{8}$



2. $\frac{3}{8} \begin{matrix} \boxed{\times 2} \\ \boxed{\times 2} \end{matrix} = \frac{6}{16}$



3. $\frac{2}{6} \begin{matrix} \boxed{\times 2} \\ \boxed{\times 2} \end{matrix} = \frac{4}{12}$



Are the fractions below equivalent? Write = or \neq .

4. $\frac{2}{4} \neq \frac{8}{12}$

5. $\frac{5}{6} = \frac{15}{18}$

6. $\frac{3}{10} = \frac{12}{40}$

7. $\frac{1}{8} \neq \frac{3}{16}$

Fill in the missing value to make both fractions equivalent.

8. $\frac{1}{7} = \frac{\boxed{4}}{28}$

9. $\frac{4}{9} = \frac{16}{\boxed{36}}$

10. $\frac{3}{4} = \frac{\boxed{9}}{12}$

11. $\frac{2}{5} = \frac{10}{\boxed{25}}$

12. Stephanie baked a cake and cut it into 15 equal pieces. She put icing on 9 pieces. Tammy baked the same size cake and cut her cake into 5 equal pieces. How many pieces of cake should Tammy put icing on so that it is equivalent to the amount of icing on Stephanie's cake? 3

13. Bryan and Caden have both completed the same amount of their homework so far. If Bryan has completed $\frac{8}{12}$ of his homework, how much has Caden completed?

A. $\frac{2}{3}$

B. $\frac{3}{4}$

C. $\frac{3}{5}$

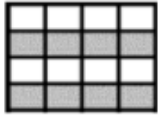
D. $\frac{2}{4}$

Put It All Together: Quick Check #5

mastery correct

1.

What fraction in, simplest form, represents the unshaded area in the grid?



$\frac{1}{4}$

$\frac{1}{2}$

$\frac{4}{5}$

$\frac{3}{4}$

3.

Danielle drew a fraction model.



Which fraction model is equivalent to Danielle's model?



2.

Alan shaded in part of the rectangular figure.

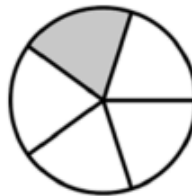


Which diagram is shaded to show a fraction equivalent to Alan's rectangle?



4.

The circle shown is divided into equal-size pieces.



Which fraction is equivalent to the shaded area of the circle?

$\frac{1}{6}$

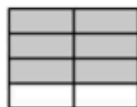
$\frac{2}{10}$

$\frac{5}{8}$

$\frac{8}{10}$

5.

Spencer shades the fraction model, as shown.



Which fraction is equivalent to the shaded area of Spencer's model?

$\frac{1}{5}$

$\frac{1}{3}$

$\frac{2}{3}$

$\frac{3}{4}$

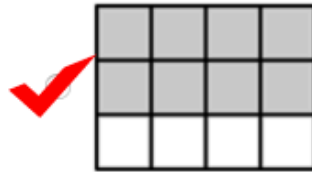
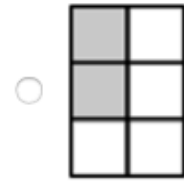
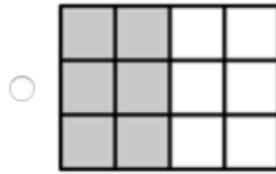
6. The shaded area of the figure represents $\frac{2}{5}$.



Which fraction is equivalent to $\frac{2}{5}$?

- $\frac{6}{9}$
 $\frac{1}{2}$
 $\frac{4}{10}$
 $\frac{1}{3}$

7. Which fraction model has a shaded area equivalent to $\frac{2}{3}$?



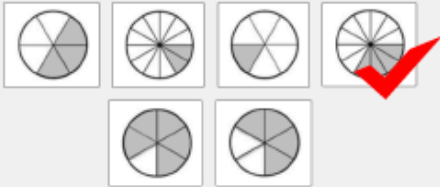
8.

Study the fraction models shown.

Drag the fraction model into the box that makes the statement true.

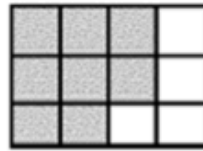


has a shaded area equal to $\frac{2}{6}$.



9.

Which fraction represents the unshaded square on the entire grid?



- $\frac{4}{8}$
 $\frac{12}{8}$
 $\frac{1}{3}$
 $\frac{8}{4}$

10. Jackson uses this fraction bar to find equivalent fractions.



Which fraction choice is an equivalent fraction?

-