

Grade 3 Math

3.NF.3a

Day 11

Standard: *Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.*

Objective: Students will learn that two fractions are equivalent (equal) if they are the same size or at the same point on a number line.

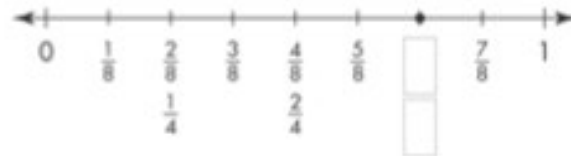
Instructional learning video to support the objective:

<https://www.teachertube.com/videos/number-lines-equivalent-fractions-410854>

Practice Worksheet: Envisions Lesson 13-2 (2 pages to be printed)

Problem of the Day (POD):

Write the two missing fractions that name the same point on the number line at the right.



Complete the comparison.

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

Games to play to support fractions:

Digital: <https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Equivalent-Fractions/>

Roll a Fraction (same as day 4)

Fraction Bump (same as day 3)

Additional Online Resources:

- STMath.org (via Clever)
- Imagine Learning (via Clever)

Name _____



Homework & Practice 13-2

Equivalent Fractions: Use the Number Line

Another Look!

Leah shares a fruit roll with her sister. Her sister says that Leah took $\frac{1}{3}$ of the fruit roll. Leah thought that she took $\frac{2}{6}$ of the fruit roll. She drew two number lines to see if the two fractions were equivalent.

The fractions are at the same location on the number line, so the fractions are equivalent.

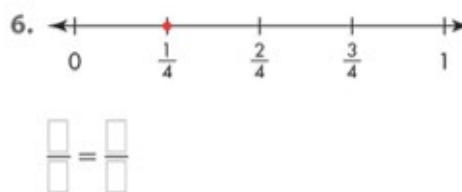
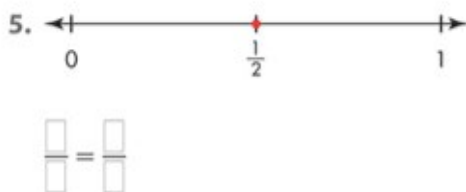
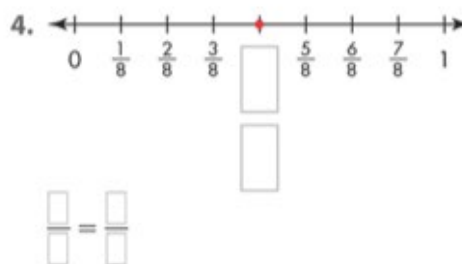
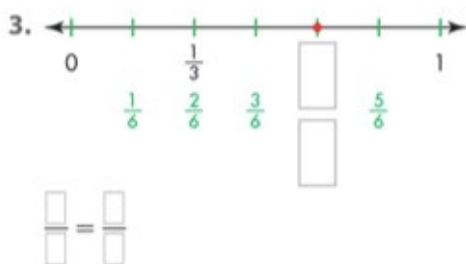
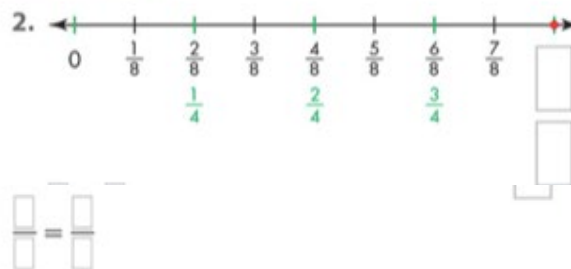
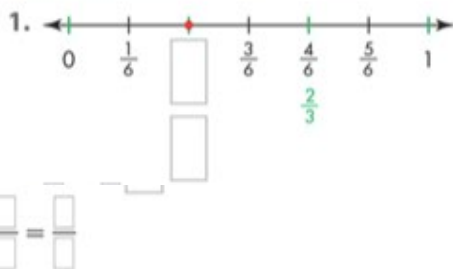
$$\frac{1}{3} = \frac{2}{6}$$



Equivalent fractions name the same part of the whole.



In 1–6, write two fractions that name the same location on the number line.



Name _____



Homework & Practice 13-2

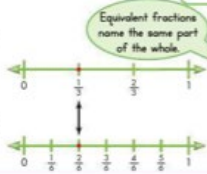
Equivalent Fractions: Use the Number Line

Another Look!

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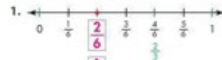
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$$\frac{1}{3} = \frac{2}{6}$$



In 1–6, write two fractions that name the same location on the number line.

Sample answers given for Exercises 4–6.



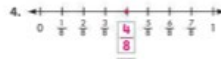
$$\frac{2}{4} = \frac{1}{2}$$



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



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



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



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



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

Digital Resources at PearsonRealize.com

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7. **MP.4 Model with Math** Oliver and Peter had the same length of string. Oliver used $\frac{1}{4}$ of his string to tie a bundle of newspapers. Peter used $\frac{2}{8}$ of his string to tie a bundle of magazines. Did they use the same amount of string? Draw a number line and write the fractions to show your answer.

Yes; $\frac{1}{4} = \frac{2}{8}$; Check students' number lines.

8. Eric divides a strip of paper into 8 equal parts. He cuts off 2 of the parts. He shades 4 of the remaining parts blue. What fraction of the remaining whole does Eric shade blue?

$$\frac{4}{6}$$

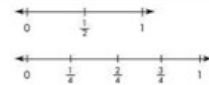
Remember to answer the hidden question.



9. **MP.5 Use Appropriate Tools** How can Brady use fraction strips to show that $\frac{1}{2}$ and $\frac{2}{4}$ are **NOT** equivalent? Brady can draw a strip representing 1 whole. Then, he can draw a strip showing $\frac{1}{2}$ of the whole and another strip showing $\frac{2}{4}$ of the same-sized whole. He will see that $\frac{1}{2}$ is greater than $\frac{2}{4}$.

10. **MP.3 Critique Reasoning** Isabel divided 32 by 8 and got 4. She says that if she divides 32 by 4, the quotient will be greater than 4. Is she correct? Explain. Yes; If you divide a number by a smaller number, you are making fewer groups. There will be more in each group, so the quotient will be greater.

11. **Higher Order Thinking** Perry thinks that $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent fractions. But when he draws the number lines to the right, he sees that $\frac{1}{2}$ and $\frac{2}{4}$ do not name the same location. Explain what is going on. Perry used different-sized wholes. The wholes must be the same size to identify equivalent fractions.

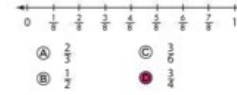


Common Core Assessment

12. Tanner used two ribbons of equal length to wrap packages. One ribbon is $\frac{3}{8}$ yard. Which of the following is **NOT** a possible length for the second ribbon?

- ☒ A $\frac{3}{8}$ yard ☐ C $\frac{1}{2}$ yard
☐ B $\frac{3}{4}$ yard ☐ D $\frac{2}{4}$ yard

13. Stacy made a number line to show equivalent fractions. Which of the following fractions is equivalent to $\frac{2}{4}$?



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