

Grade 4 Unit 2

Lesson 8

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Unit 2 Lesson 8: Equivalent Fractions on the Number Line

WU Estimation Exploration: A Shaded Portion (Warm up)

Student Task Statement

If the entire diagram represents 1 whole, about what fraction is shaded?



Make an estimate that is:

| too low | about right | too high |
|---------|-------------|----------|
| | | |

1 Handy Number Lines

Student Task Statement

Andre used number lines to find fractions that are equivalent to $\frac{1}{5}$. He drew this number line:



Then, he drew three more lines and wrote a fraction for the point on each line:



1. How did Andre use the number lines to find fractions equivalent to $\frac{1}{5}$? Explain your thinking to a partner.
2. How can number lines be used to show whether the following fractions are equivalent?
 - a. $\frac{8}{10}$ and $\frac{4}{5}$
 - b. $\frac{14}{20}$ and $\frac{4}{5}$
3. Find three fractions that are equivalent to $\frac{6}{5}$. Explain or show how Andre's number lines can help.

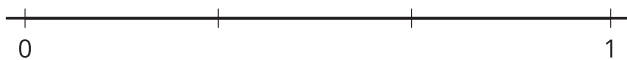
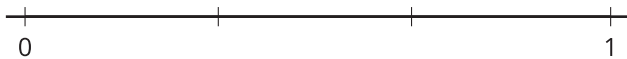
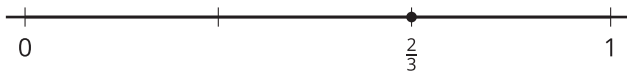
2 Can It Be Done?

Student Task Statement

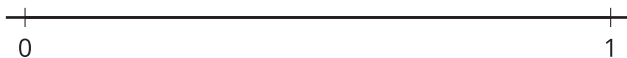
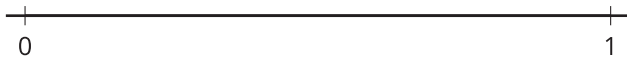
1. Priya wants to find fractions that are equivalent to $\frac{2}{3}$, other than $\frac{4}{6}$. She wonders if she can find equivalent fractions with denominator 9, 10, and 12.

$\frac{\quad}{9} \qquad \frac{\quad}{10} \qquad \frac{\quad}{12}$

Can it be done? Use number lines to show your reasoning.



2. Represent $\frac{1}{10}$ on a number line. Then, find two fractions that are equivalent to $\frac{1}{10}$. How would you use the number line to show that they are equivalent to $\frac{1}{10}$?



3. Can you find an equivalent fraction for $\frac{1}{10}$ with 100 for the denominator? Explain or show your reasoning.