

Grade 3: Fraction Comparisons

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3.NF.A.3 - Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.

Check the boxes to mark each statement True or False.

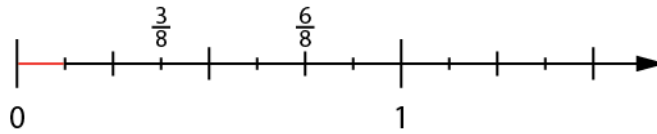
	TRUE	FALSE
$1 < \frac{6}{6}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{1}{3} < \frac{1}{4}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{3}{8} < \frac{6}{8}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{2}{2} < 2$	<input type="checkbox"/>	<input type="checkbox"/>

Solution

Correct if student checks False, False, True, True.

- $1 = \frac{6}{6}$, so the statement is False.
- $\frac{1}{3} > \frac{1}{4}$, so the statement is False.
- $\frac{3}{8} < \frac{6}{8}$, so the statement is True.
- $\frac{2}{2} < 2$, so the statement is True.

Most grade 3 students will draw a diagram to help with at least some of these comparisons. For example, this diagram shows that $\frac{3}{8} < \frac{6}{8}$ (because $\frac{3}{8}$ is located to the left of $\frac{6}{8}$ on a number line, or because 3 copies of the orange piece make a lesser amount than 6 copies of the orange piece):



Students might answer at least some of the questions without a picture by using their conceptual understanding of fractions. Here are some examples of reasoning that would explain each comparison:

- $1 = \frac{6}{6}$: To make a part of size $\frac{1}{6}$, you divide 1 into 6 equal parts. Therefore 6 parts of size $\frac{1}{6}$ make 1. (Note: $\frac{6}{6}$ means 6 parts of size $\frac{1}{6}$.)
- $\frac{1}{3} > \frac{1}{4}$: If you divide 1 into 3 equal parts, each part ($\frac{1}{3}$) is going to be greater than if you were to divide 1 into 4 equal parts ($\frac{1}{4}$). (The same whole divided into more parts means each part is smaller.)
- $\frac{3}{8} < \frac{6}{8}$: Divide 1 into 8 equal parts. Three of those parts will be a lesser amount than six of those parts.
- $\frac{2}{2} < 2$: The reasoning that showed $\frac{6}{6} = 1$ also shows that $\frac{2}{2} = 1$. And 1 is less than 2.

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<https://belearninghero.org/readiness-check>

Name: _____

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$\frac{3}{8} < \frac{6}{8}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{2}{2} < 2$	<input type="checkbox"/>	<input type="checkbox"/>