

Is $\frac{7}{8} < \frac{8}{9}$? Explain your reasoning

	Student Responses	Rubric Level and Notes
Student 1	<p>True. $\frac{7}{8}$ is smaller than $\frac{8}{9}$ because I cross multiplied and $7 \times 9 (=63)$ is less than $8 \times 8 (=64)$</p>	
Student 2	<p>True. $\frac{7}{8}$ and $\frac{8}{9}$ are both less than 1, however $\frac{8}{9}$ is only $\frac{1}{9}$ less than 1, while $\frac{7}{8}$ is $\frac{1}{8}$ less than 1. 9 pieces of a whole are smaller than 8 pieces of the same whole, which means $\frac{8}{9}$ is closer to 1 than $\frac{7}{8}$ is. Therefore $\frac{8}{9}$ is larger than $\frac{7}{8}$.</p>	
Student 3	<p>True. $\frac{7}{8}$ is smaller than $\frac{8}{9}$ because I found a common denominator and compared the numerators. $\frac{7}{8} = \frac{63}{72}$ $\frac{8}{9} = \frac{64}{72}$ 63 is less than 64, so $\frac{63}{72} < \frac{64}{72}$ which means that $\frac{7}{8} < \frac{8}{9}$</p>	