3.NF.3 Equivalent Fractions

Alec and Felix are brothers who go to different schools. The school day is just as long at Felix' school as at Alec's school. At Felix' school, there are 6 class periods of the same length each day. Alec's day is broken into 3 class periods of equal length.

One day, it snowed a lot so both of their schools started late. Felix only had four classes and Alec only had two. Alec claims his school day was shorter than Felix' was because he had only two classes on that day. Is he right?

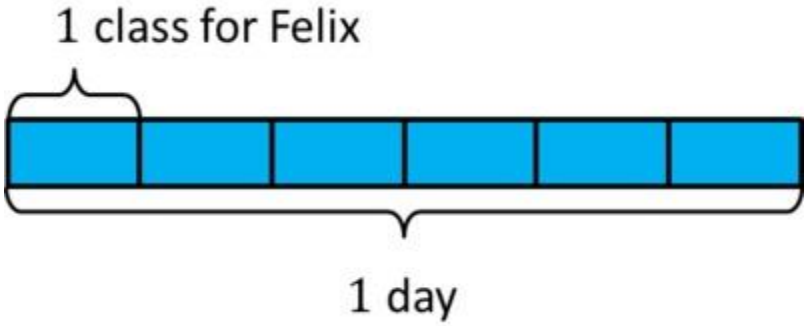
Commentary

The purpose of this task is for students to investigate a claim about a comparison of two fractions in a context. Many fraction problems are set in food contexts or a situation where a physical thing is being shared. It is important for students to work on more abstract quantities like time as well. This task addresses MP3, Construct viable arguments and critique the reasoning of others.

Solutions

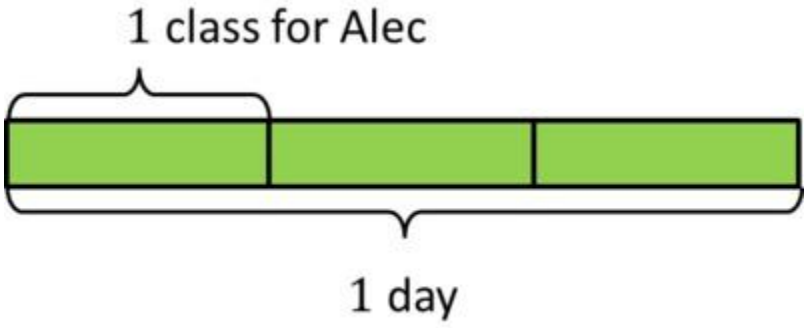
Solution: 1

Felix has six equal class periods each day.



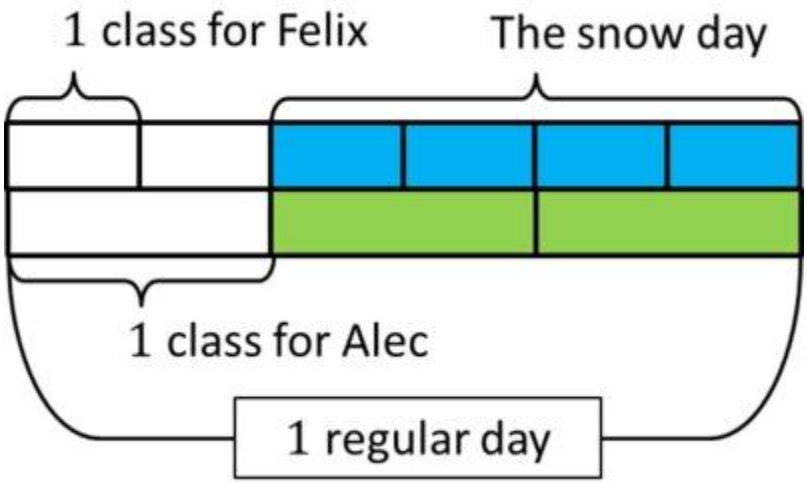
So each class period lasts for $\frac{1}{6}$ of the day.

Alec has three equal class periods each day.



So each class period lasts for $\frac{1}{3}$ of the day.

Felix only had 4 class periods, so he went to school for $\frac{4}{6}$ of a full day. Alec only had 2 class periods, so he went to school for $\frac{2}{3}$ of a full day.



But a full day is equal for the two brothers, so two of Felix' class periods are the same length as one of Alec's. The brothers actually went to school for the same amount of time on the snow day.

Public Comments

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