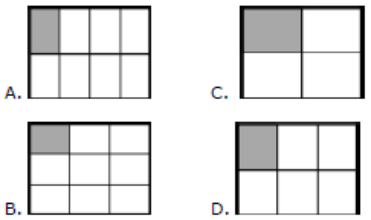
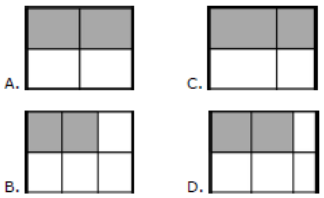
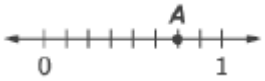
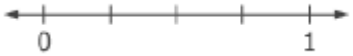
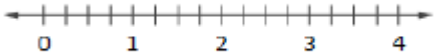
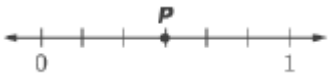
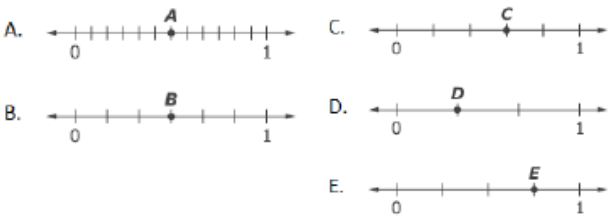
SBACC Grade 3 Analysis of Questions for Claim 1 Domain of Numbers and Operations - Fractions

Standard DOK Level	Evidence	Question
DOK Level 1 3.NF.1	represents a fraction 1/*b* as 1 part of a whole that is partitioned into *b* equal parts, and a fraction *a/b* as the quantity formed by *a* parts of size 1/*b* using a model. For this evidence statement, *a/b* may be greater than, less than, or equal to 1.	Which model shows 1/8 of the whole figure shaded? 
		Which model shows 2/6 of the whole figure shaded? 
DOK Level 2 3.NF.2	identifies and represents fractions on a number line using the interval 0–1 as the whole, with or without partitioning.	Enter the fraction located at point *A* on the number line. 
		Use the Add Point tool to place a point on the number line where 2/4 should be located. 
		Drag each fraction to the number line, as close to the exact location as possible. 3/8 1/8 7/8 
		Place each fraction on the number line, as close to its exact location as possible. 2/2 ¼ 4/1 2/4 
DOK Level 1 3.NF.2	identifies two fractions as equal if they are the same size or at the same point on a number line	Use the fraction strip model shown to help you with this problem.  Enter a fraction equal to 2/4 that has a **different** denominator.
DOK Level 1 3.NF.2		Use this number line to answer the question that follows.  Choose **all** the number lines that show a fraction equal to the fraction shown by point *P*. 

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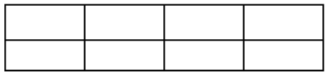
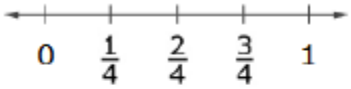
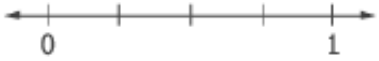
<table>
<tr><td>DOK Level 1 3.NF.3</td><td>Generates simple equivalent fractions using visual fraction models.</td><td>Use this model to solve the problem.
 
Click parts of the model to shade 2/4 of the whole model.</td></tr>
<tr><td>DOK Level 1 3.NF.3</td><td rowspan="3">Expresses whole numbers as fractions and recognized fractions equal to whole numbers.</td><td>Use the number line to help you complete the equation.
 

$1 = \frac{\square}{4}$</td></tr>
<tr><td>DOK Level 1 3.NF.3</td><td>Use the number line to help you complete the equation.
 

$1 = \frac{\square}{4}$
What numerator goes in the box (☐) to make the equation true?</td></tr>
<tr><td>DOK Level 1 3.NF.3</td><td>What denominator goes in the box ( ) to make the equation true?
$2 = \frac{2}{\square}$
Or could be
What numerator goes in the box (☐) to make the equation true?
$\frac{\square}{2} = 1$
Or could be
What numerator goes in the box (☐) to make the equation true?
$\frac{\square}{2} = 1$</td></tr>
<tr><td>DOK Level 2 3.NF.3</td><td>Compares two fractions with the same numerator or the same denominator using the symbols <, =, or >.</td><td>Select the symbol (<, >, or =) that correctly compares each pair of numbers.
<table><tr><th></th><th><</th><th>></th><th>=</th></tr><tr><td>$\frac{5}{8} \square \frac{5}{6}$</td><td></td><td></td><td></td></tr><tr><td>$\frac{3}{6} \square \frac{3}{8}$</td><td></td><td></td><td></td></tr></table></td></tr>
<tr><td></td><td></td><td>Which number goes in the box to make the comparison true?
$\frac{5}{8} > \frac{\square}{8}$
A. 3 B. 5 C. 7 D. 9</td></tr>
</table>

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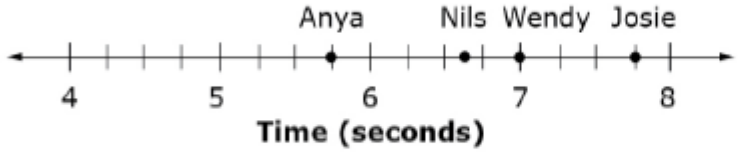
DOK Level 2 3.NF.3		Decide whether each comparison is true or false. Click True or False for each comparison.

	True	False
$\frac{3}{4} < \frac{1}{4}$		
$\frac{2}{4} < \frac{2}{3}$		

Claim 2: (Primary emphasis on operations of numbers and measurement and data.)

Three friends ran a race. The points on the number line represent the race times, in seconds, for each friend.



Who had the shortest time?

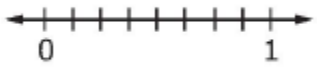
A. Anya
B. Nils
C. Wendy
D. Josie

Claim 3: (Primary emphasis on operations of numbers , fractions, and measurement and data.)

Robert said, "When comparing two fractions with a numerator of 1, the fraction with the bigger denominator is always greater."

Part A
Drag each fraction to the correct location on the number line.

Part B
Is Robert's statement true? Click Yes or No.



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

Is Robert's statement true?
Click Yes or No.

Yes No

SBACC Grade 3 Analysis of Questions for Claim 2-4 Domain of Numbers and Operations - Fractions

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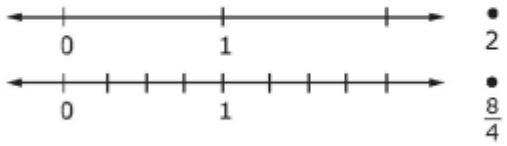
Compare $\frac{8}{4}$ and 2.

Part A
Plot each number on a number line.



Part B
$\frac{8}{4}$ [drop-down choices: <, =, >] 2

Part A
Which comparison between $\frac{1}{5}$ and $\frac{1}{8}$ is correct?

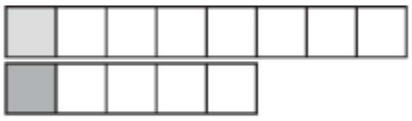
A. $\frac{1}{5} < \frac{1}{8}$

B. $\frac{1}{5} > \frac{1}{8}$

C. $\frac{1}{5} = \frac{1}{8}$

Part B
Choose a picture that supports your answer in *Part A*.

D.



E.

F.