Grade 5 Rich Math Task CCSS-M PL Dec. 2014

Mr. Edmunds shared twelve pencils with his four sons as follows:

- Alan received $\frac{1}{3}$ of the pencils.
- Bill received $\frac{1}{4}$ of the pencils.
- Carl received more than 1 pencil.
- David received more pencils than Carl.

Part A

On the number line below, represent the fraction of the total number of pencils that was given to Alan and Bill combined.



Part B

Which fraction of the total number did Carl and David each receive? Provide proof that your answer is correct.