Problem 1:
An equation is shown below.
$\frac{2}{3} \times \frac{\text { 回 }}{\text { 国 }}=n$
Sarah claims that for any fraction multiplied by $\frac{2}{3}$, n will always be less than $\frac{2}{3}$.

Give an example that supports her claim.


Give an example that does not support her claim.


What conclusions can you draw from your examples that you listed above?

## Problem 2:

Juan has $7 \frac{1}{2}$ cups of chopped nuts. He wants to make either banana nut muffins or carrot muffins. The table shows how many cups of nuts are needed for each batch.

| Muffin Type | Chopped Nuts per Batch |
| :---: | :---: |
| Banana Nut | $\frac{1}{2}$ cup |
| Carrot | $\frac{5}{8}$ cup |

How many batches of banana nut muffins can Juan make, if he makes only banana nut muffins?

How many batches of carrot muffins can Juan make if he makes only carrot muffins?

