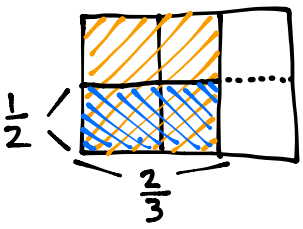
Name _____ Date _____

1. Solve. Draw a model to explain your thinking.

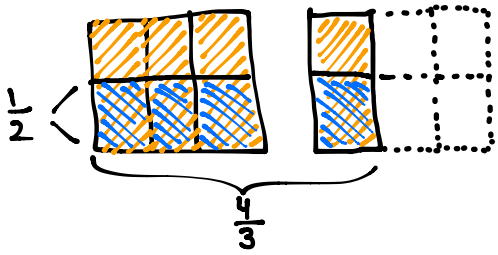
a. $\frac{1}{2}$ of $\frac{2}{3} = \frac{1}{2}$ of 2 thirds = 1 thirds



$\frac{1}{2} \times \frac{2}{3} = \frac{2}{6}$

$= \frac{1}{3}$

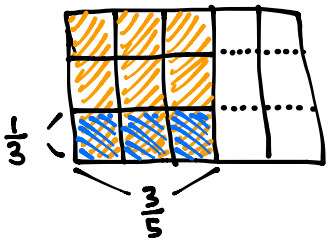
b. $\frac{1}{2}$ of $\frac{4}{3} = \frac{1}{2}$ of 4 thirds = 2 thirds



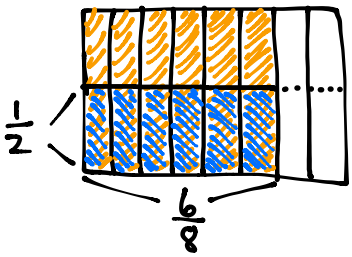
$\frac{1}{2} \times \frac{4}{3} = \frac{4}{6}$

$= \frac{2}{3}$

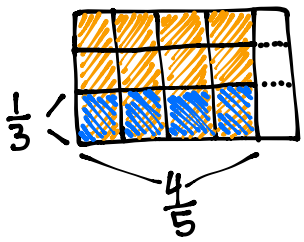
c. $\frac{1}{3}$ of $\frac{3}{5} = \frac{3}{15} = \frac{1}{5}$



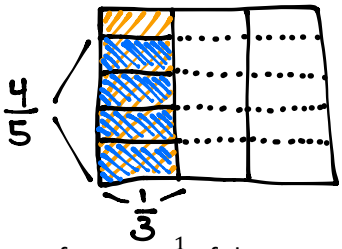
d. $\frac{1}{2} \times \frac{6}{8} = \frac{6}{16} = \frac{3}{8}$



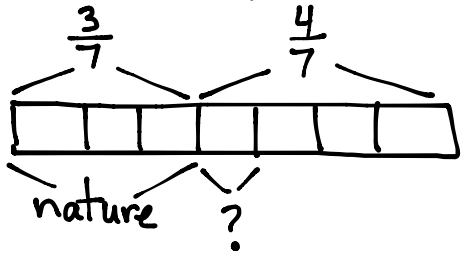
e. $\frac{1}{3} \times \frac{4}{5} = \frac{4}{15}$



f. $\frac{4}{5} \times \frac{1}{3} = \frac{4}{15}$

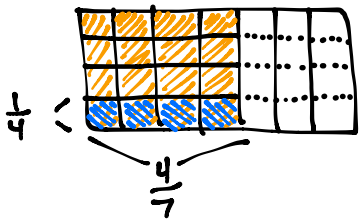


2. Sarah has a photography blog. $\frac{3}{7}$ of her photos are of nature. $\frac{1}{4}$ of the rest are of her friends. What fraction of all Sarah's photos is of her friends? Support your answer with a model.



$\frac{1}{4}$ of $\frac{4}{7} = \frac{1}{4}$ of 4 sevenths = 1 seventh

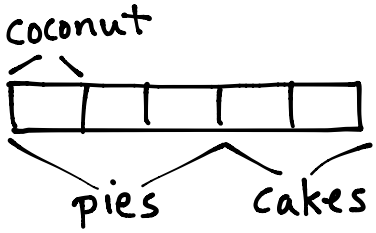
$= \frac{1}{7}$



$\frac{1}{4} \times \frac{4}{7} = \frac{4}{28} = \frac{1}{7}$

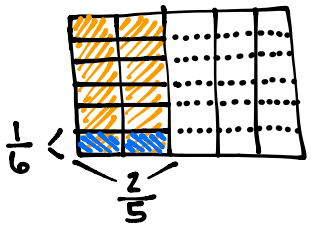
3. At Laurita's Bakery, $\frac{3}{5}$ of the baked goods are pies, and the rest are cakes. $\frac{1}{3}$ of the pies are coconut. $\frac{1}{6}$ of the cakes are angel-food.

   a. What fraction of all of the baked goods at Laurita's Bakery are coconut pies?



$\frac{1}{3}$ of 3 units are coconut. So 1 unit is coconut, which is $\frac{1}{5}$.

   b. What fraction of all of the baked goods at Laurita's Bakery are angel-food cakes?

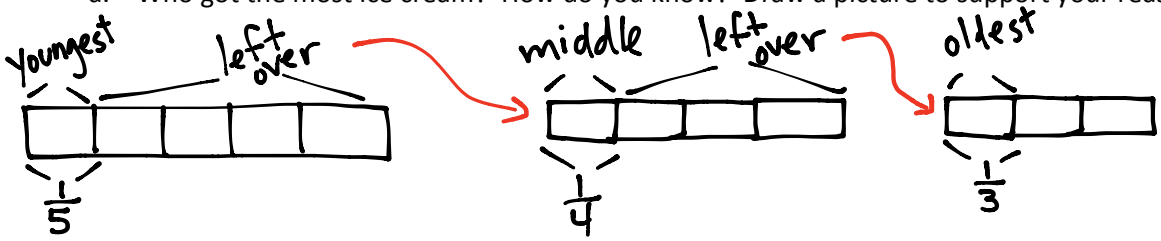


$\frac{1}{6}$ of $\frac{2}{5}$ are angel-food cakes.

$\frac{1}{6} \times \frac{2}{5} = \frac{2}{30} = \frac{1}{15}$

4. Grandpa Mick opened a pint of ice cream. He gave his youngest grandchild $\frac{1}{5}$ of the ice cream and his middle grandchild $\frac{1}{4}$ of the remaining ice cream. Then he gave his oldest grandchild $\frac{1}{3}$ of the ice cream that was left after serving the others.

   a. Who got the most ice cream? How do you know? Draw a picture to support your reasoning.



Each child gets 1 unit, which is $\frac{1}{5}$ of a pint.

   b. What fraction of the pint of ice cream will be left if Grandpa Mick serves himself the same amount as the second grandchild?

If Grandpa takes $\frac{1}{5}$ of a pint, there will be $\frac{1}{5}$ of a pint left over.