Name: _____ Date: _____

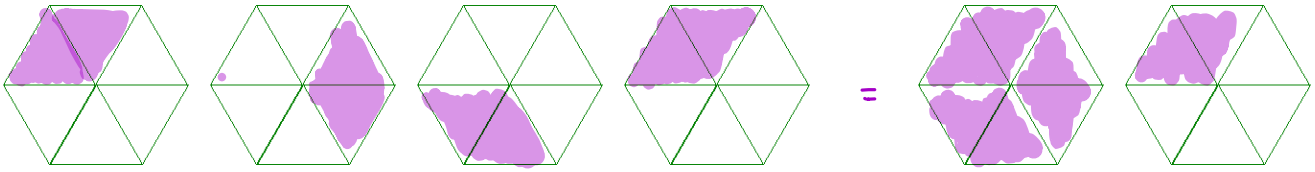
Learning Goal 2.2	I can multiply and divide fractions.

Consider the product

4 groups

$4 \times \frac{1}{3}$ ← size of the group

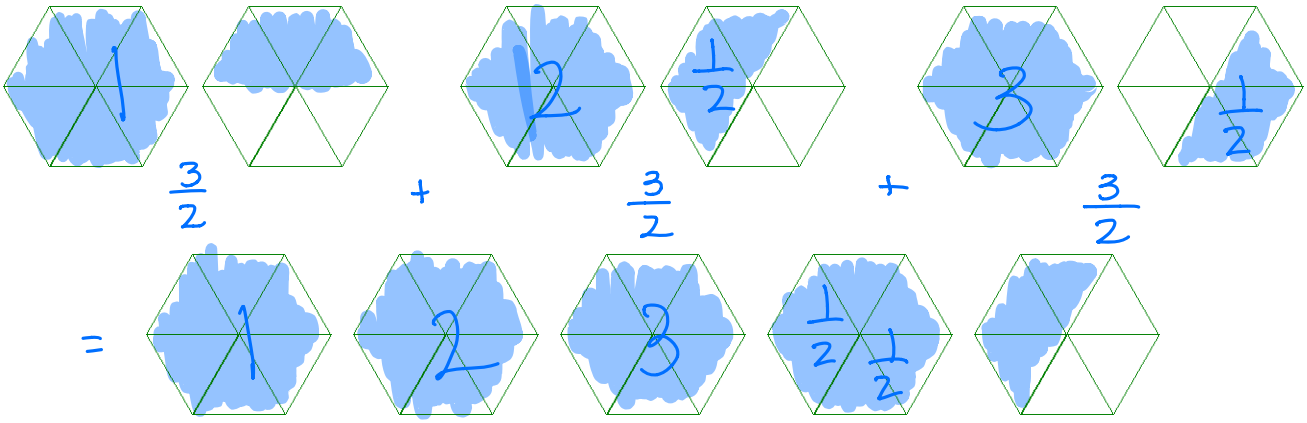
4 of $\frac{1}{3}$



$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$ $= \frac{4}{3} = 1\frac{1}{3}$

Again!

$3 \times \frac{3}{2}$



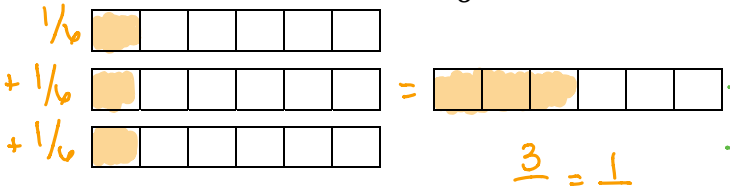
$\frac{3}{2} + \frac{3}{2} + \frac{3}{2}$

$= \frac{9}{2} = 4\frac{1}{2}$

Twice more!

3 groups

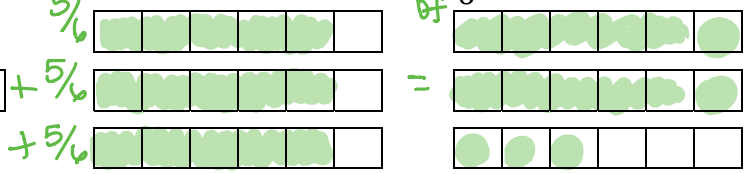
$3 \times \frac{1}{6}$



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

$3 \times \frac{5}{6}$

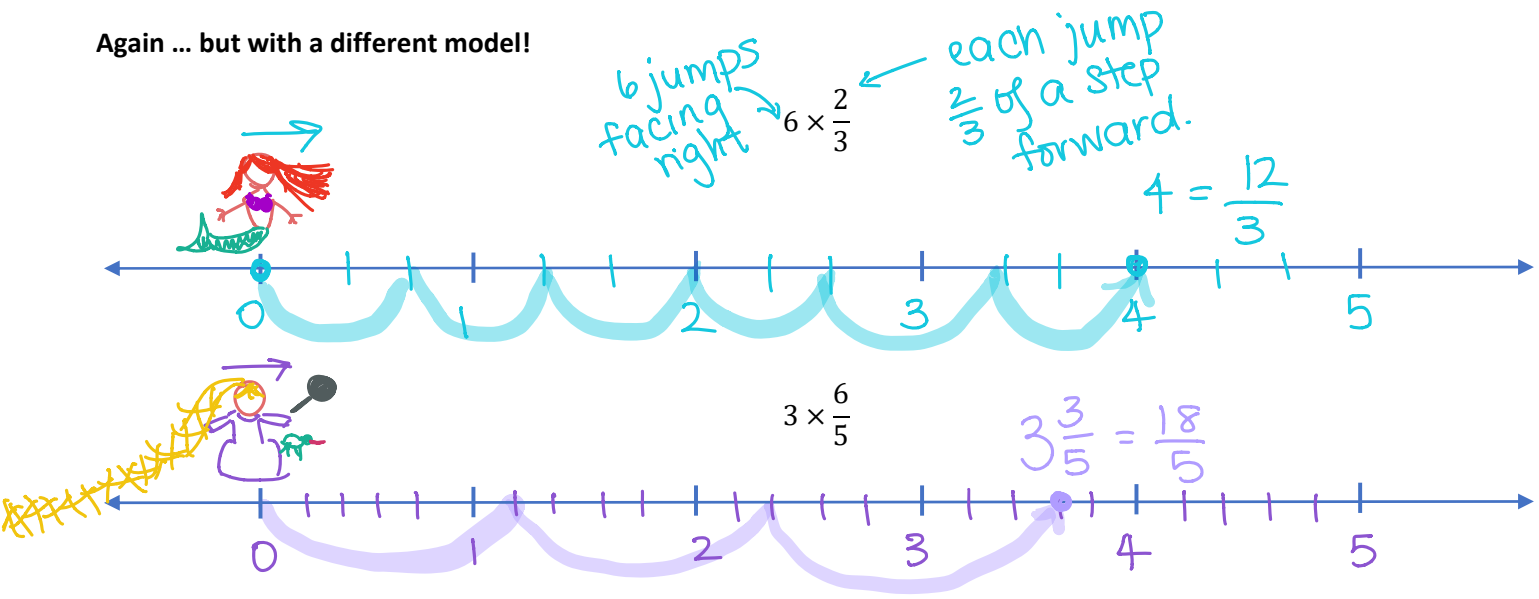
3 of $\frac{5}{6}$



$\frac{15}{6} = 2\frac{3}{6} = 2\frac{1}{2}$

Assignment p. 202 #4 – 9, 11, 12, 15 Quiz Next Day!

Again … but with a different model!



Multiplying a Fraction and Whole Number

* multiply the whole # and the numerator together
* keep the denominator.

Example Calculate the following products.

a. $4 \times \frac{5}{7} = \frac{20}{7} = 2\frac{6}{7}$

b. $\frac{1}{3} \times 12 = \frac{12 \div 3}{3 \div 3} = 4$

c. $\frac{7}{3}$ of $9 = \frac{7}{3} \times 9 = \frac{63 \div 3}{3 \div 3} = 21$

d. 9 of $\frac{5}{9} = \frac{45 \div 9}{9 \div 9} = 5$

Example A spider has eight legs. An ant has $^3/_4$ as many legs as a spider. How many legs does an ant have?

$\frac{3}{4}$ of $8 = \frac{3}{4} \times 8 = \frac{24 \div 4}{4 \div 4} = 6$ Ants have 6 legs.

Example Jenny is making a recipe that calls for six ~~scoops~~ cups of flour. She wants to make only $^2/_3$ of the recipe. How many ~~scoops~~ cups will she need to use?

$\frac{2}{3}$ of $6 = \frac{2}{3} \times 6 = \frac{12 \div 3}{3 \div 3} = 4$ She will use 4 cups of flour.

Assignment p. 202 #4 – 9, 11, 12, 15 Quiz Next Day!