

# We can MULTIPLY FRACTIONS by a WHOLE NUMBER! (4.NF.4)

the number of groups  $\rightarrow$   $3 \times \frac{2}{4} = t$   $\leftarrow$  the total

the number in each group

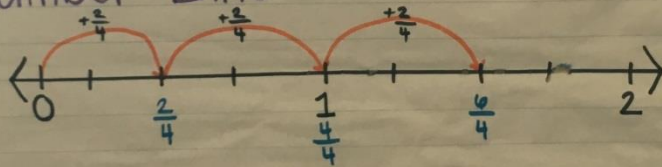
① Repeated Addition:

$$\left(\frac{2}{4}\right) + \left(\frac{2}{4}\right) + \left(\frac{2}{4}\right) = \frac{6}{4} = \left(1\frac{2}{4}\right)$$

② Area Model:

$$3 \times \left(\frac{2}{4}\right) = 2 \times \left(\frac{3}{4}\right) = \left(1\frac{2}{4}\right)$$

③ Number Line:



## MULTIPLYING A FRACTION BY A MIXED NUMBER!

$$5 \times 2\frac{1}{4} = t$$

$$(5 \times 2) + (5 \times \frac{1}{4})$$

$$10 + \frac{5}{4} = 10\frac{5}{4} = \left(11\frac{1}{4}\right)$$

$5 \begin{array}{|l} \hline 2 \\ \hline 10 \\ \hline \frac{5}{4} \\ \hline \end{array}$