- Why do we need the same denominators? And shapes?

$$\frac{2}{4} \quad + \quad \frac{3}{8}$$

Will *not* work!
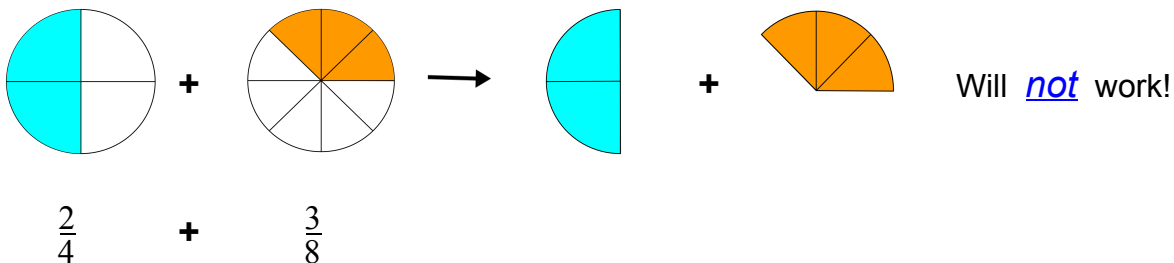
- We will use *equivalent* fractions to make the denominators the same.

$$\frac{2}{4} \xrightarrow[\times 2]{\times 2} \frac{4}{8}$$

4, *8*

Draw your rainbows and equivalent fractions.

$$+ \frac{3}{8} \rightarrow \frac{3}{8}$$

$$\frac{7}{8}$$

$$7\frac{5}{9} \xrightarrow[\times 5]{\times 5} 7\frac{25}{45}$$

$$+10\frac{2}{15} \xrightarrow[\times 3]{\times 3} 10\frac{6}{45}$$

9, *15*

15x2 or 15+15 = *30*

15x3 or 30+15 = *45*

$$17\frac{31}{45}$$

- Steps in finding LCD (least *common* denominator):
  1. Circle *bigger* denominator.
  2. Do other denominators *go into* it?
     If yes, you found the *LCD*!
     If not, go up again by your *circled / bigger* number.
        (multiply by *2* or add it to itself)
  3. Do other denominators go into that?
     Yes, winner!
     No, keep going up by *bigger* # until you get a winner.

● Find the LCD of:

$$4\tfrac{5}{6}, \quad 2\tfrac{2}{9}, \quad \tfrac{3}{4}$$

1. _6_, **_9_**, _4_
2. circle biggest number
3. do 6 and 4 go into 9? _no_
4. multiply 9 by 2 = 18
   do 6 and 4 go into 18? _no_
5. multiply 9 by 3 = 27
   do 6 and 4 go into 27? _no_
6. multiply 9 by 4 = 36
   do 6 and 4 go into 36? _yes_

4. 9 x _4_ = 36

5. 6 x _6_ = 36

6. 4 x _9_ = 36

LCD: _36_

● Practice

$$5\tfrac{2}{3} \xrightarrow[\times 8]{\times 8} 5\tfrac{16}{24}$$

$$+1\tfrac{5}{8} \xrightarrow[\times 3]{\times 3} 1\tfrac{15}{24}$$

_3_, **_8_**
24

$$6\tfrac{31}{24} \longrightarrow \tfrac{31}{24} = 1\tfrac{7}{24}$$

31÷24=1r7

$$= 7\tfrac{7}{24}$$