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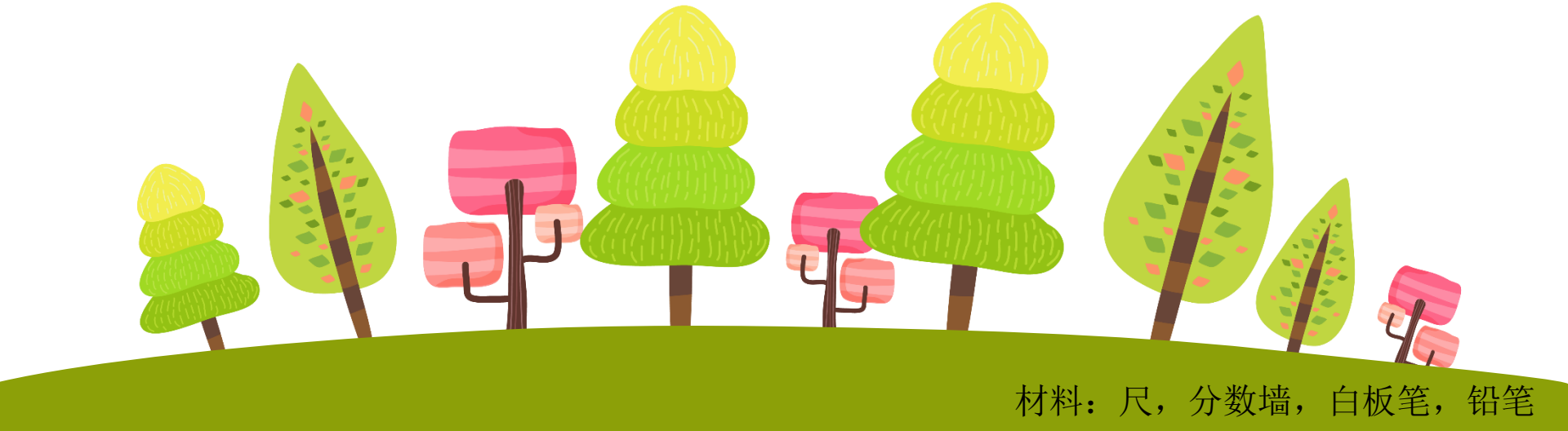
Review:

$\frac{7}{9} > \frac{7}{10}$ $\frac{6}{12} > \frac{6}{16}$

$\frac{11}{16} < \frac{15}{16}$ $1 = \frac{3}{3}$

$1 = \frac{3}{3} = (\quad) = (\quad) = (\quad)$ ……

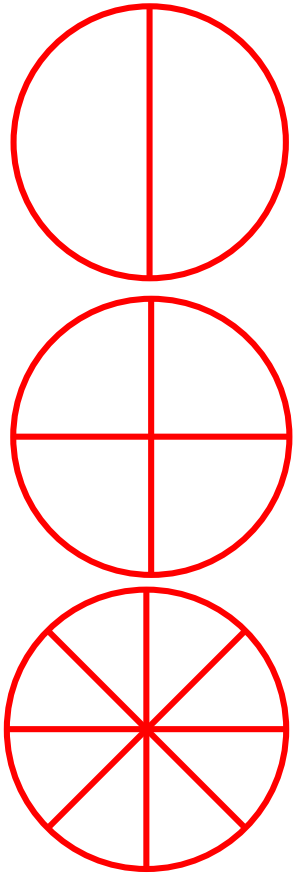
Equivalent Fractions



材料：尺，分数墙，白板笔，铅笔

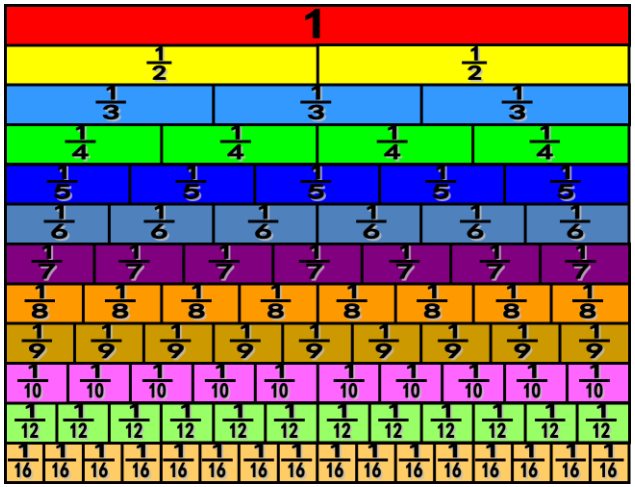
Compare $\frac{1}{2}$ $\frac{2}{4}$ $\frac{4}{8}$

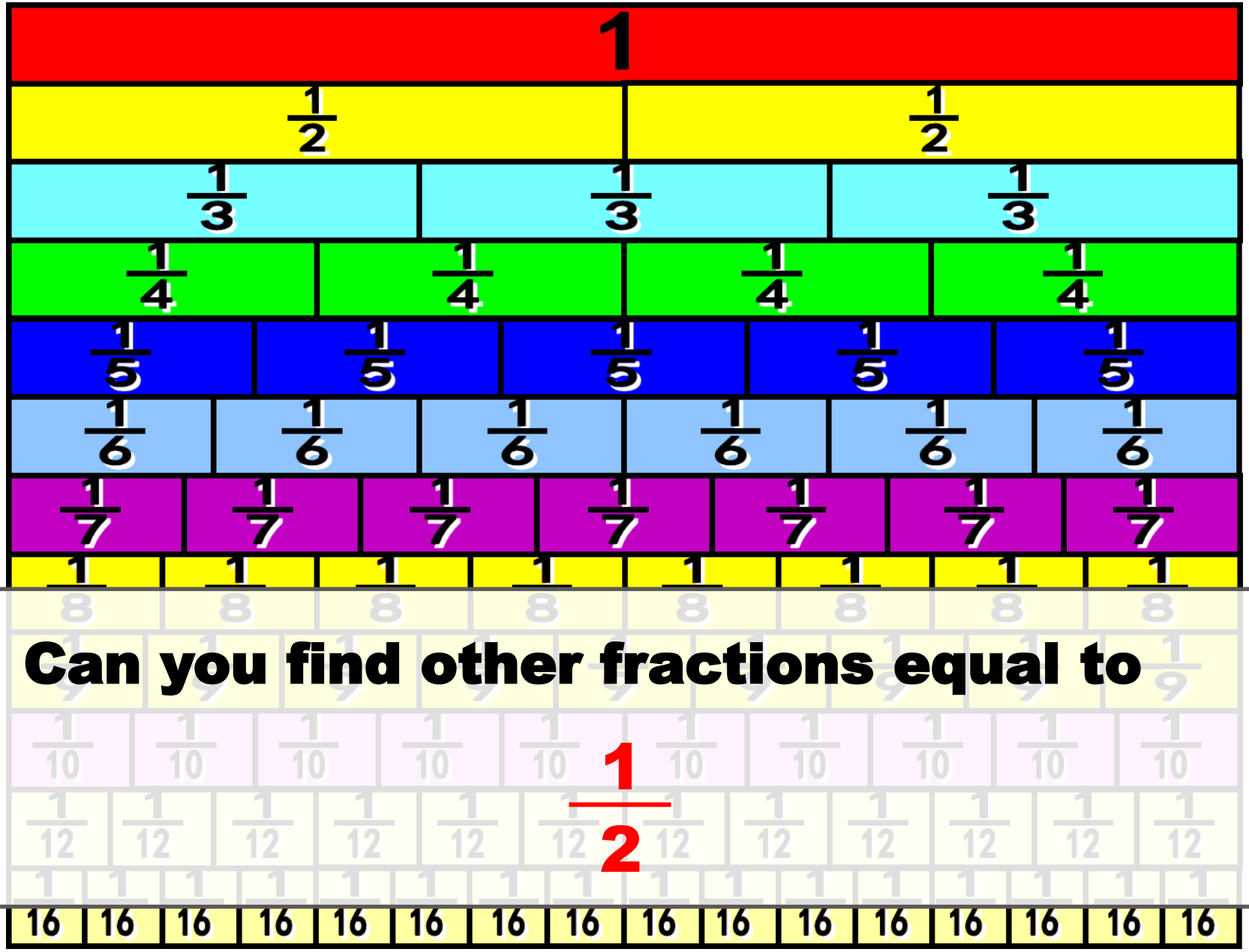
Method 1



Method 2

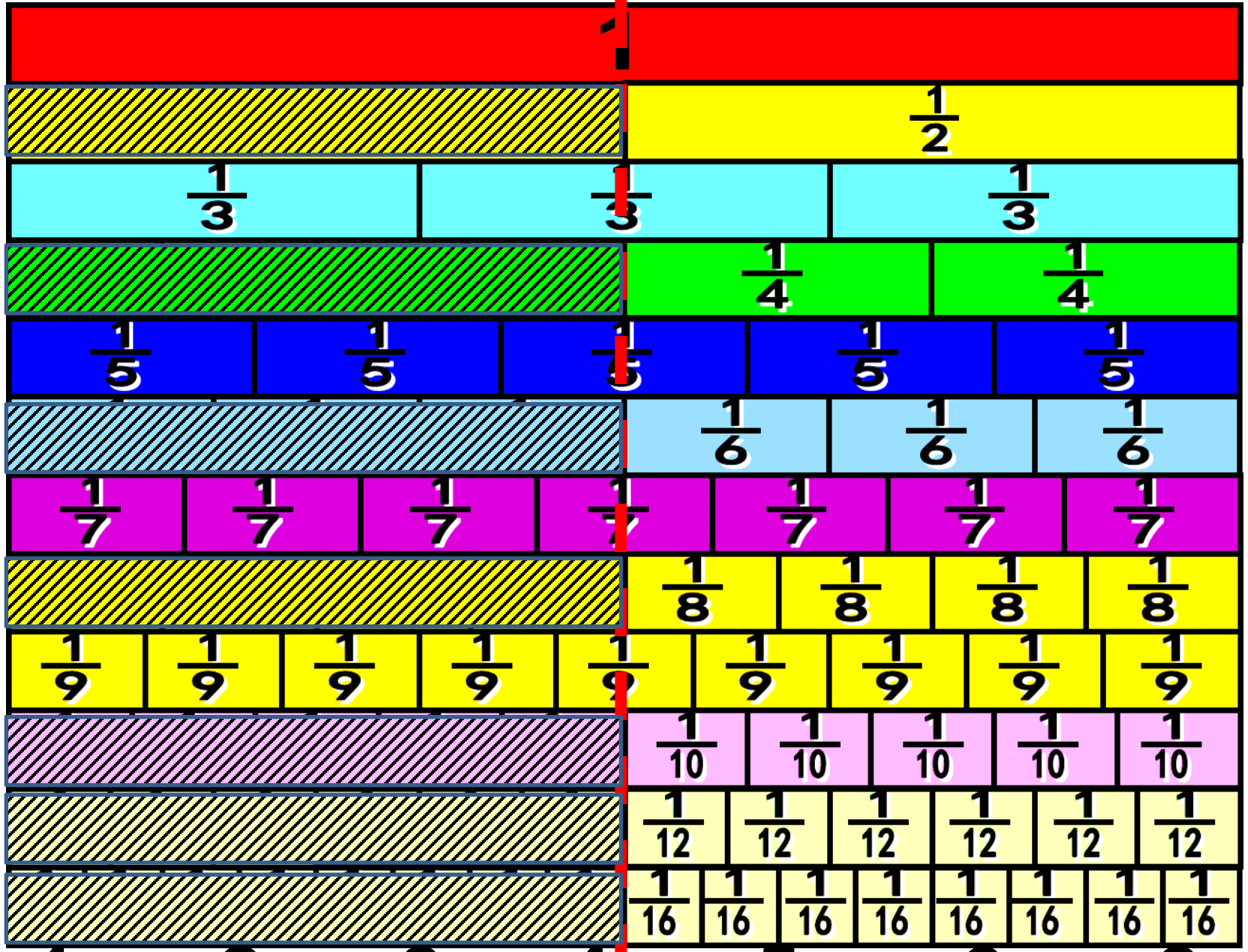
Method 3





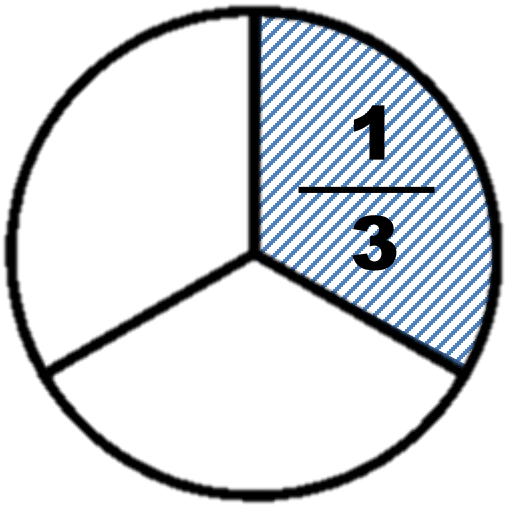
Can you find other fractions equal to

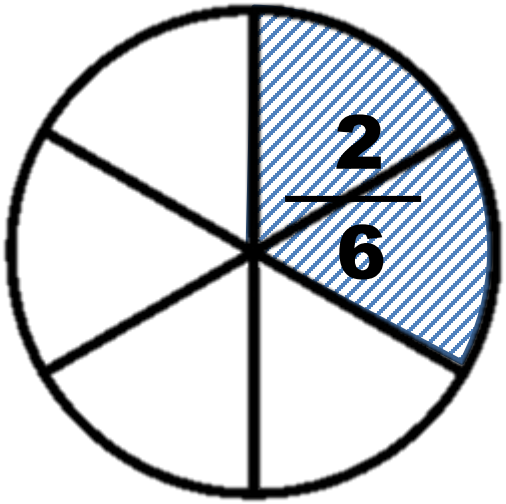
$$\frac{1}{2}$$

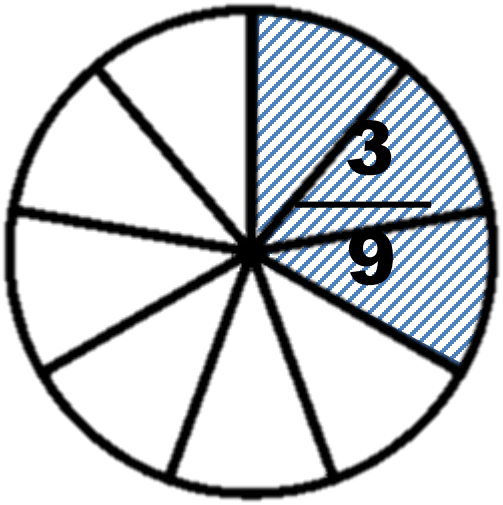


$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12} = \frac{8}{16} \ldots$$

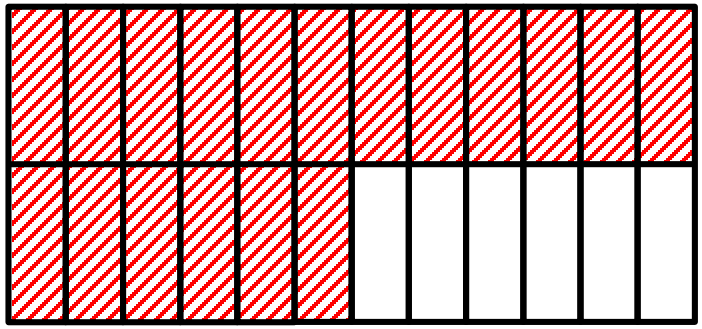
Compare $\frac{1}{3}$ $\frac{2}{6}$ $\frac{3}{9}$



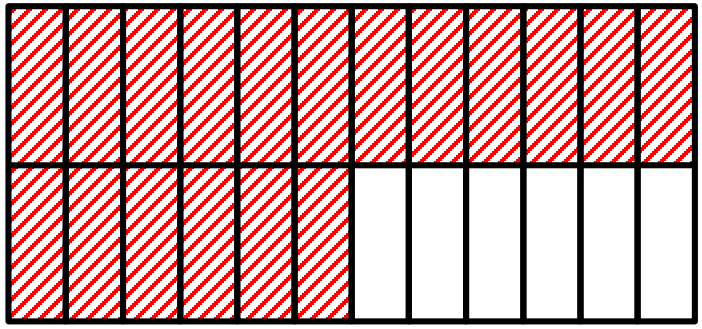




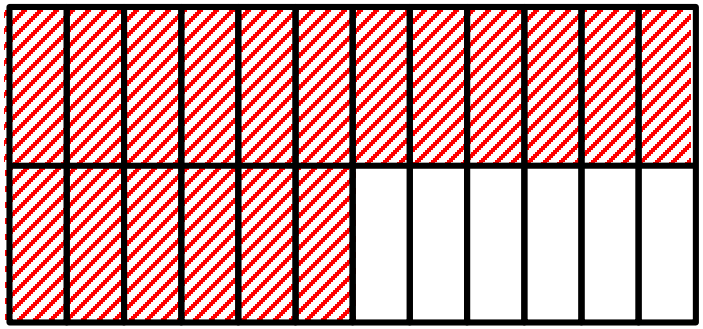
Compare $\frac{3}{4}$ $\frac{6}{8}$ $\frac{9}{12}$



$\frac{3}{4}$ Each part has 6 grids



$\frac{6}{8}$ Each part has 3 grids



$\frac{9}{12}$ Each part has 2 grids

Conclusion

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

$\frac{1}{3} \xrightarrow{\times 3} \frac{3}{9} \xrightarrow{\times 3}$

If you **multiply** or **divide** numerators and denominators by **the same** number(except **0**), the new fraction will be equivalent to the original fraction

Exercises 1：Find equivalent fractions and fill in the blanks:

$\frac{1}{3}$ $\frac{6}{8}$ $\frac{3}{7}$ $\frac{6}{14}$ $\frac{12}{16}$ $\frac{3}{9}$

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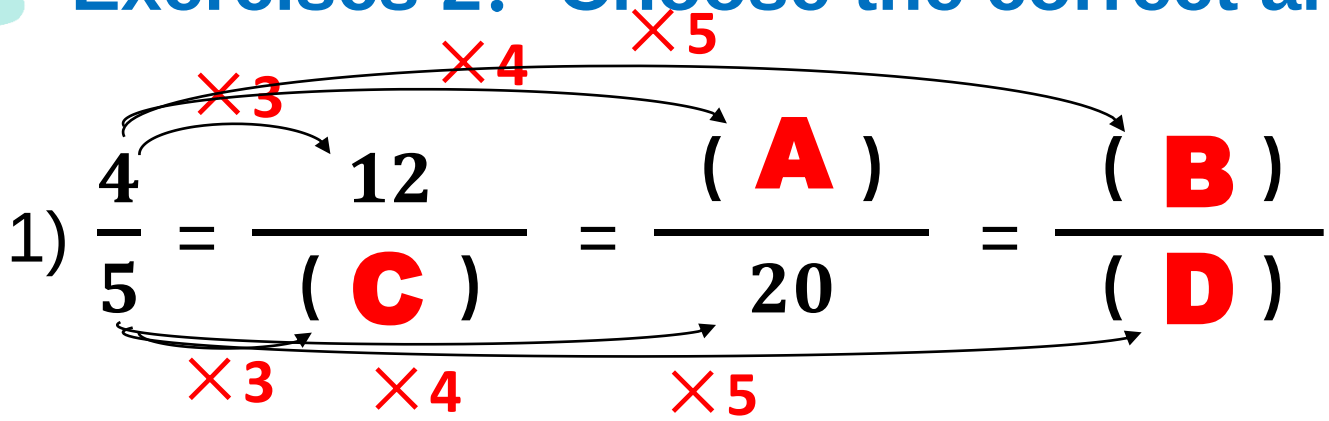
Exercises 2：Choose the correct answer:

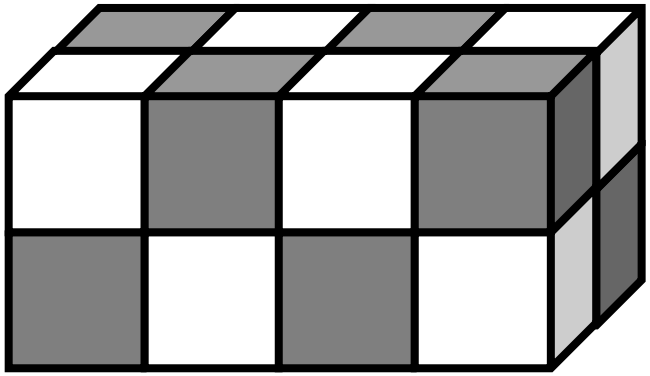


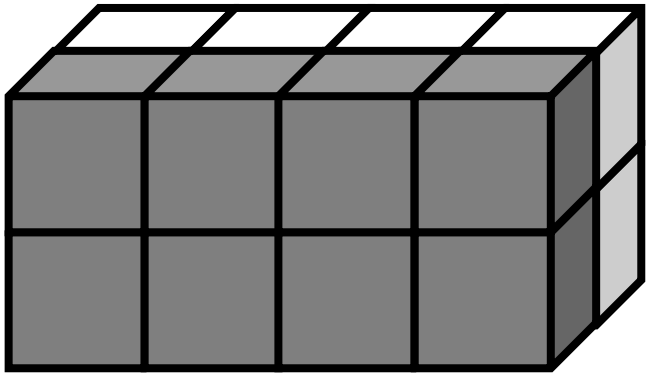
A. **16**　　B. **20**　　C. **15**　　D. **25**

2）Compare with $\frac{2}{6}$, $\frac{4}{12}$ and $\frac{3}{9}$, which is not equivalent （**D**）

A. $\frac{1}{3}$　　B. $\frac{5}{15}$　　C. $\frac{6}{18}$　　D. $\frac{12}{21}$

Exercises 3：Write equivalent fractions according to the picture:





$$(\frac{1}{2}) = (\frac{2}{4}) = (\frac{4}{8}) = (\frac{8}{16})$$

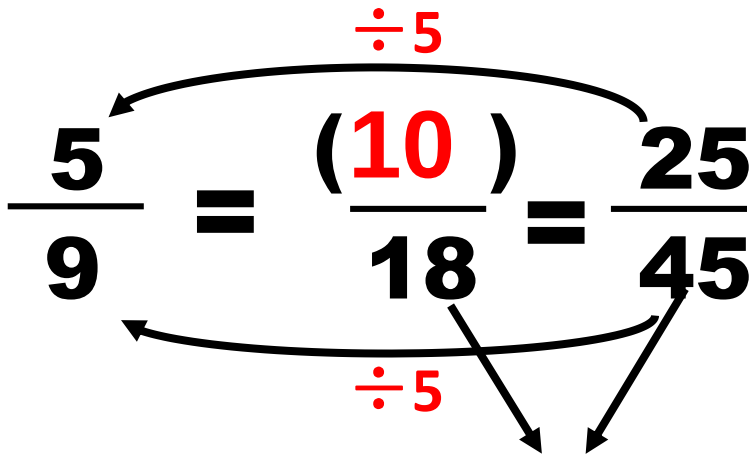
When calculate the addition $\frac{1}{5} + \frac{8}{20}$

When we're adding fractions, they must have the same denominator,

$$\frac{1}{5} \times \frac{(\ 4\ )}{(\ 4\ )} = \frac{(\ 4\ )}{(20)} \Rightarrow \frac{1}{5} + \frac{8}{20} = \frac{(\ 4\ )}{(20)} + \frac{(\ 8\ )}{(20)}$$

or $$\frac{8}{20} \div \frac{(\ 4\ )}{(\ 4\ )} = \frac{(\ 2\ )}{(\ 5\ )} \Rightarrow \frac{1}{5} + \frac{8}{20} = \frac{(\ 1\ )}{(\ 5\ )} + \frac{(\ 2\ )}{(\ 5\ )}$$

Challenge



They have the same common divisor of 9

What did you learn in this lesson?