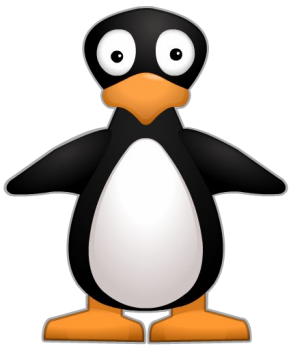
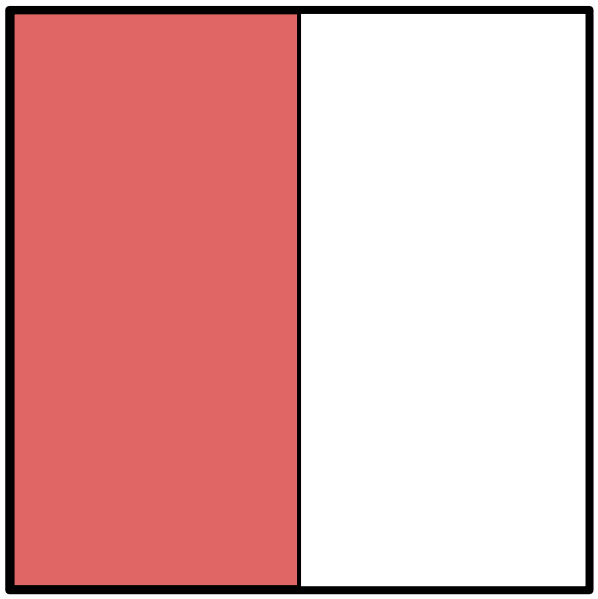
Equivalent Fractions

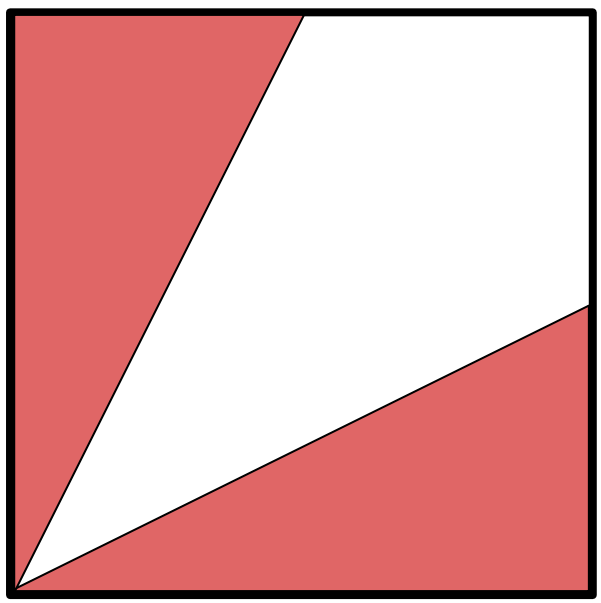
Cover equal areas with different size unit fractions.

Is it fair?

Do these squares show equal shaded areas?
Use the tool to justify your answer.



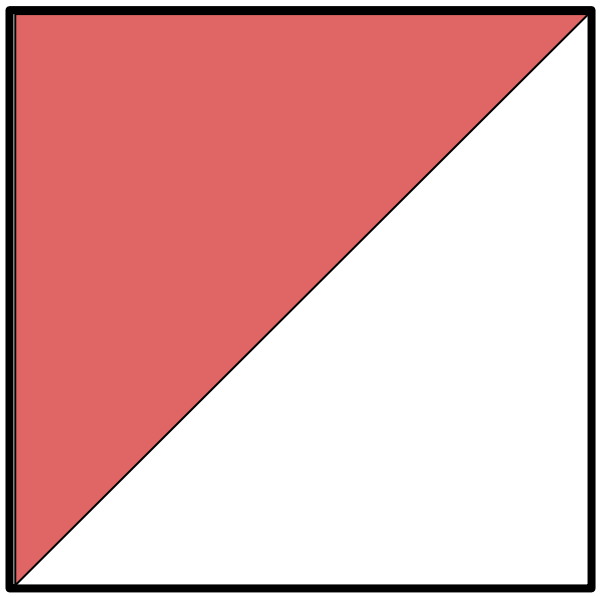


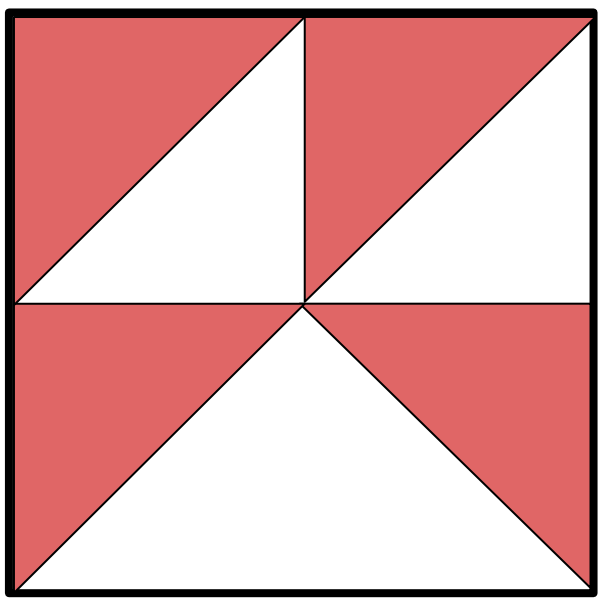


5

Share Strategies

Let's use the tool to prove if these fractions are equivalent.

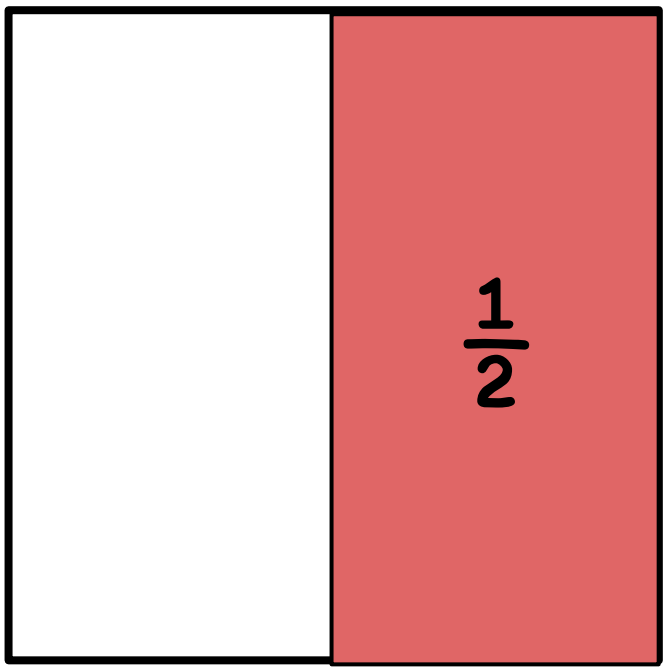


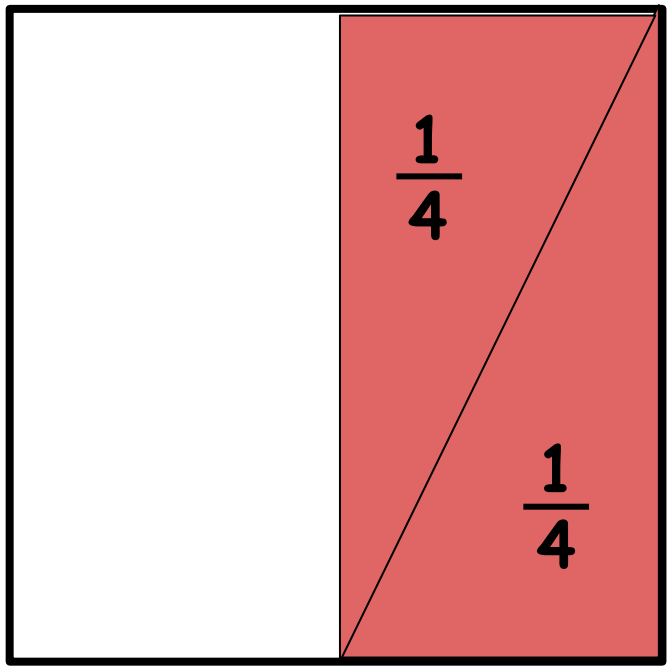


Summarize

(1 of 2)

Both squares have the same amount of area covered using different size pieces.
The fractions they represent are equivalent.





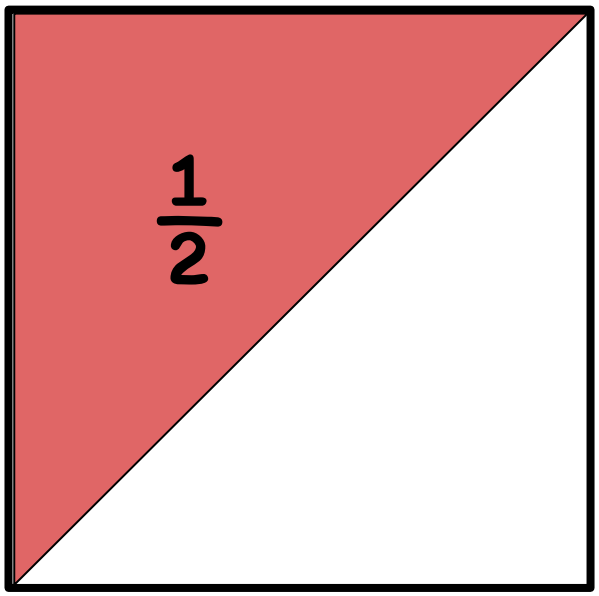
$\frac{1}{2}$ = $\frac{1}{4} + \frac{1}{4}$

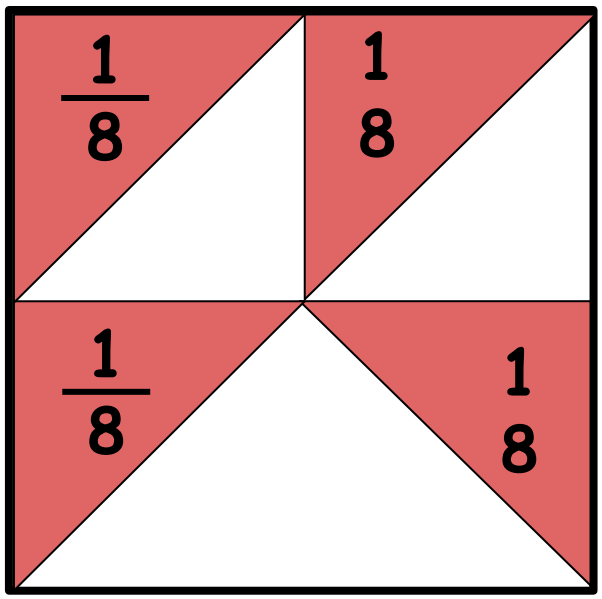
$\frac{1}{2}$ = $\frac{2}{4}$

Summarize

(2 of 2)

Both squares have the same amount of area covered using different size pieces.
The fractions they represent are equivalent.





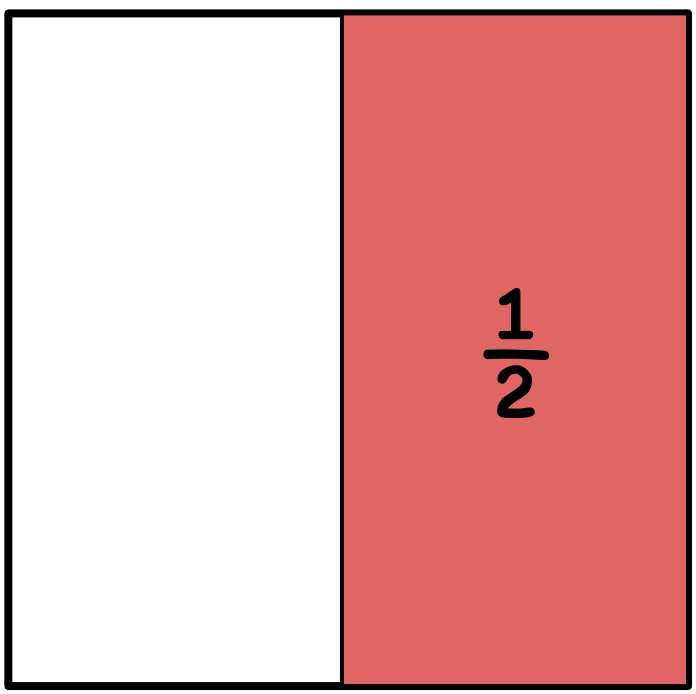
$$\frac{1}{2} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$$

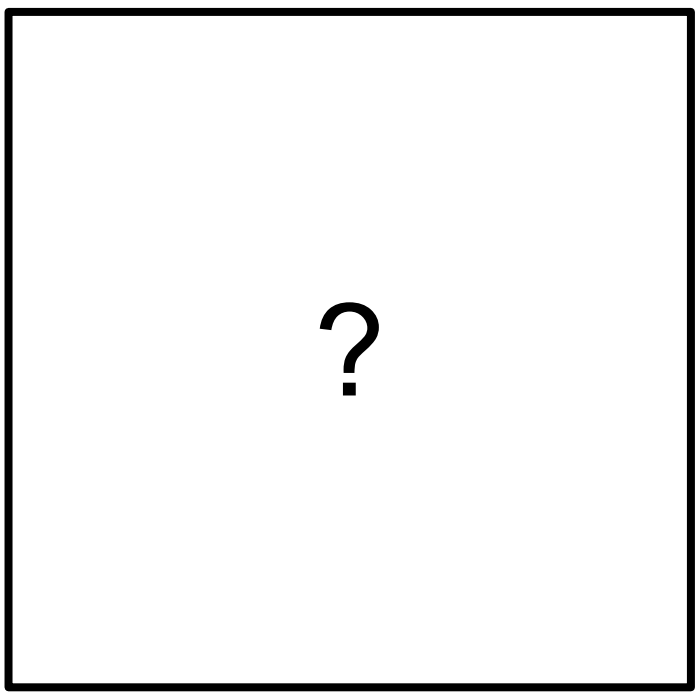
$$\frac{1}{2} = \frac{4}{8}$$

5

Create Your Own Equivalent Pairs

Find more than one way to cover one-half ($\frac{1}{2}$) the square using different unit fractions.



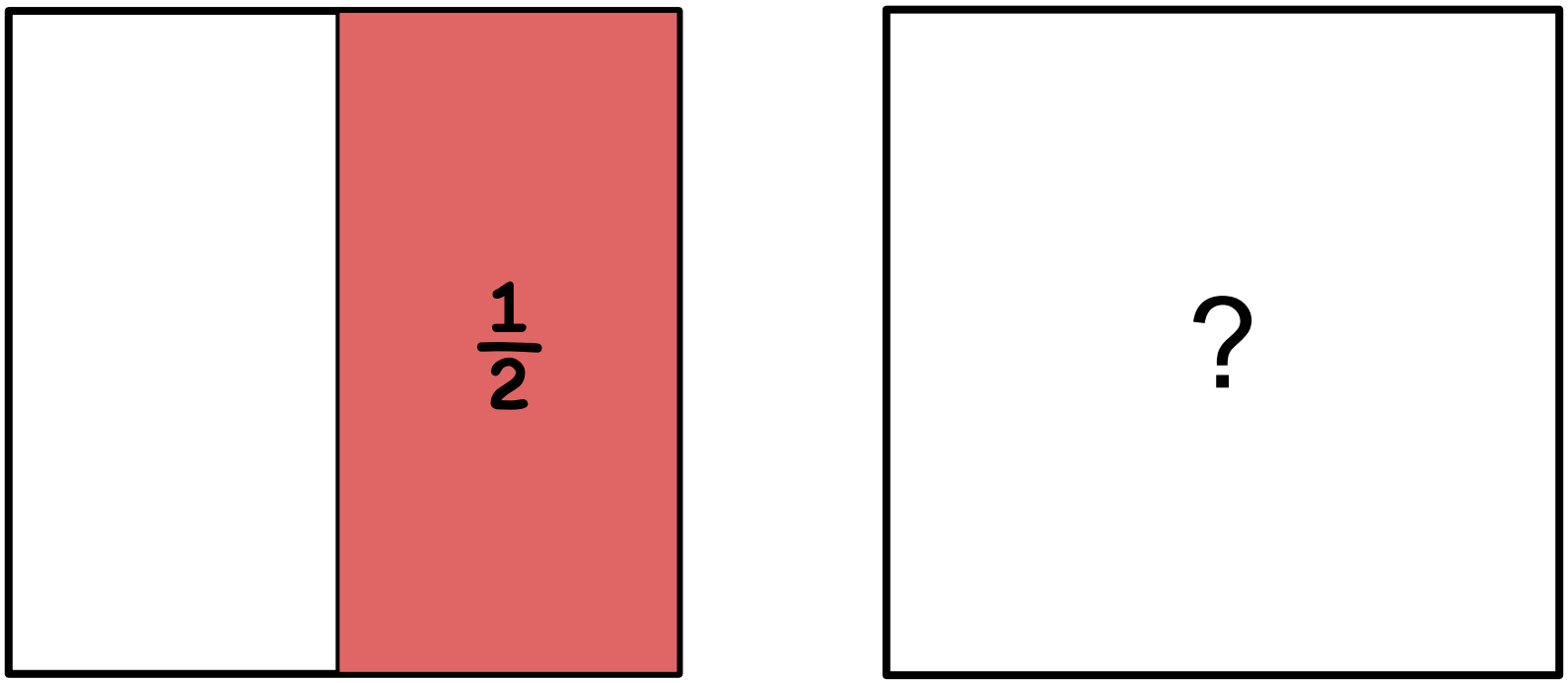


$$\frac{1}{2} = \frac{\square}{\square}$$

Record your work, label the unit fractions, and write an equation.

Share Equivalent Pairs

What other shapes did you find to cover $\frac{1}{2}$ the square?
Let's use the tool to find out!

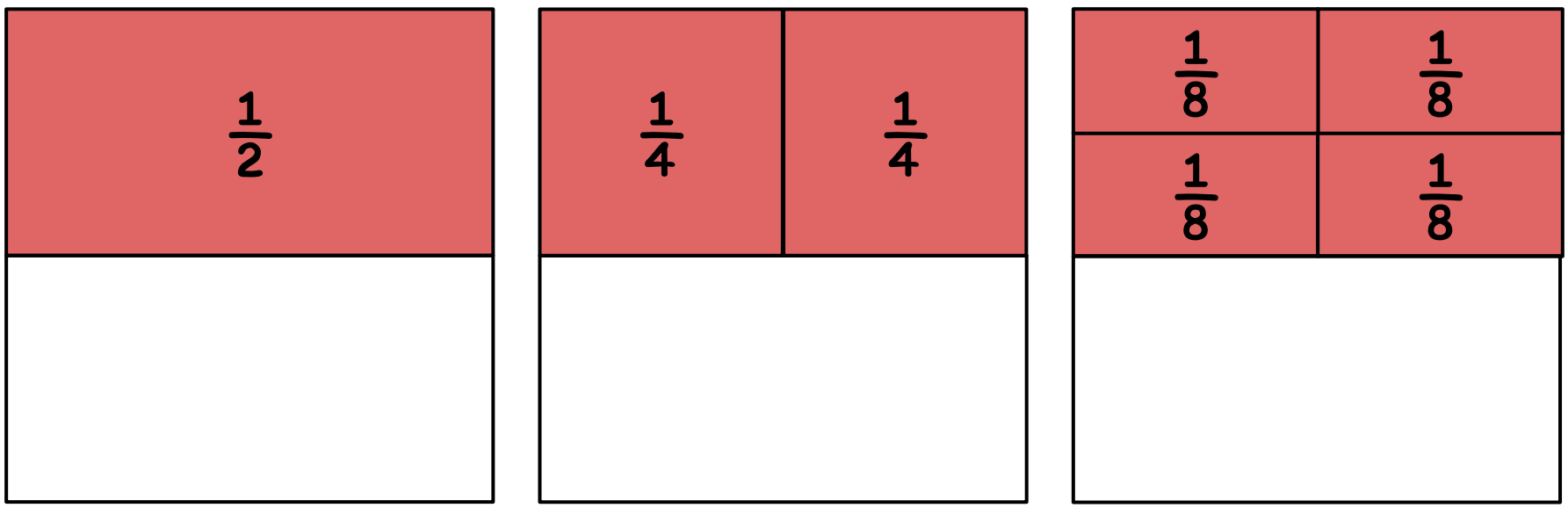


$$\frac{1}{2} = \frac{\square}{\square}$$

Summarize

(1 of 2)

The squares show equivalent fractions. Each square has the same area covered but with different units and number of pieces

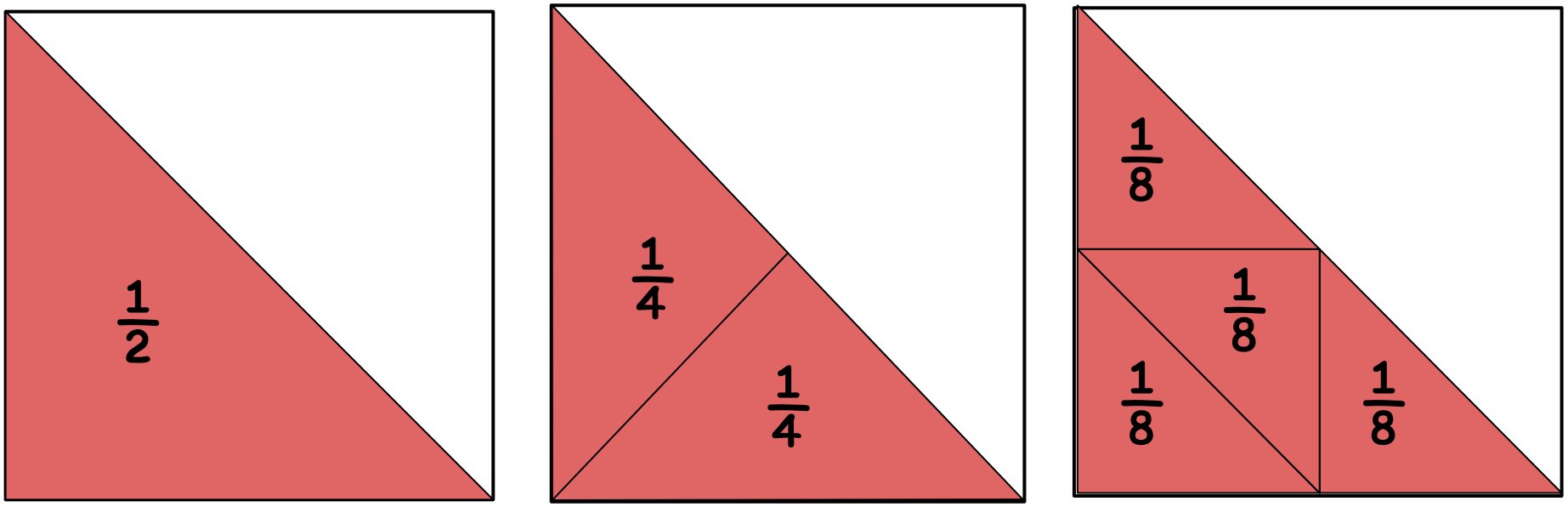


$$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$$

Summarize

(2 of 2)

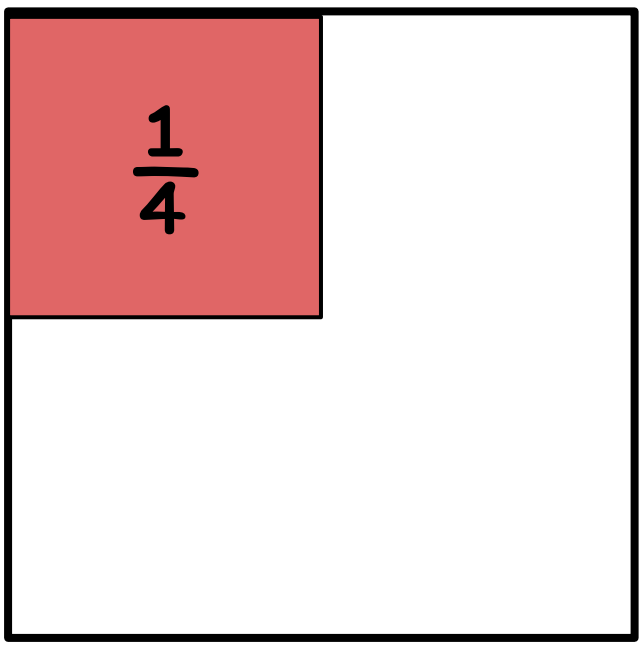
Equivalent fractions are different ways of showing the same amount.

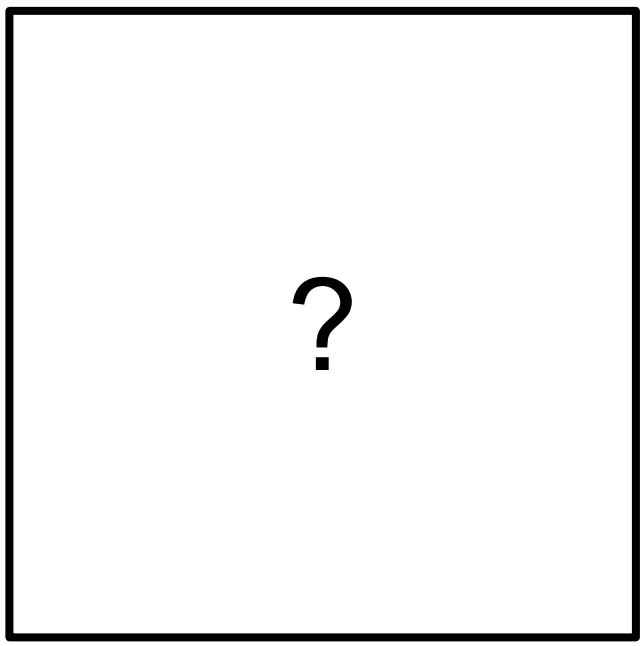


$$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$$

Conclusion

Find another way to fill the square without using fourths.





$\frac{1}{4} = \frac{\square}{\square}$

Record your work and write an equation.