

Grid Node Activity

Non-Congruent Parts

Topic: Fraction Concepts

3.G.A.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.

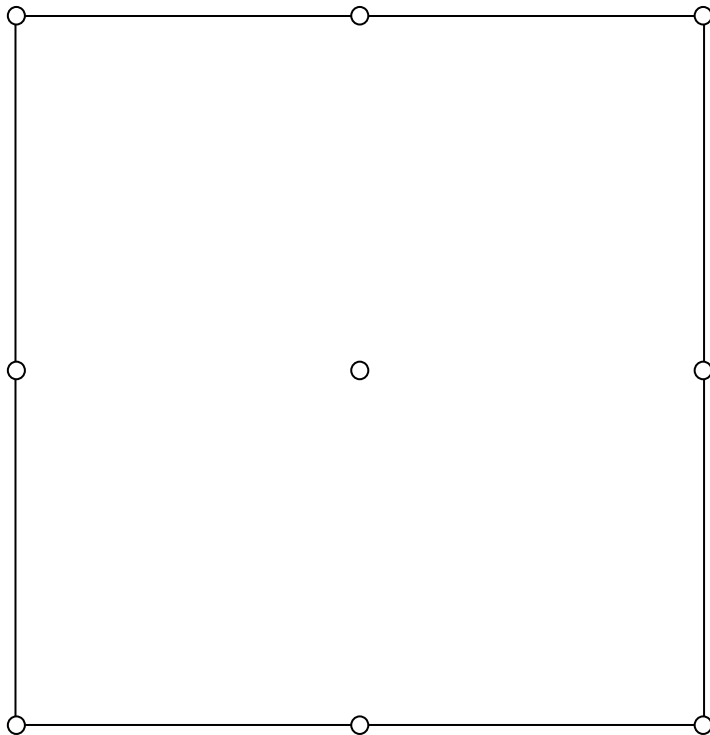
Activity Category: Exploration

Learning Goals: Use spatial reasoning to build equal parts using different shapes on a square.

Integration: For initial fraction concept development and reinforcement.

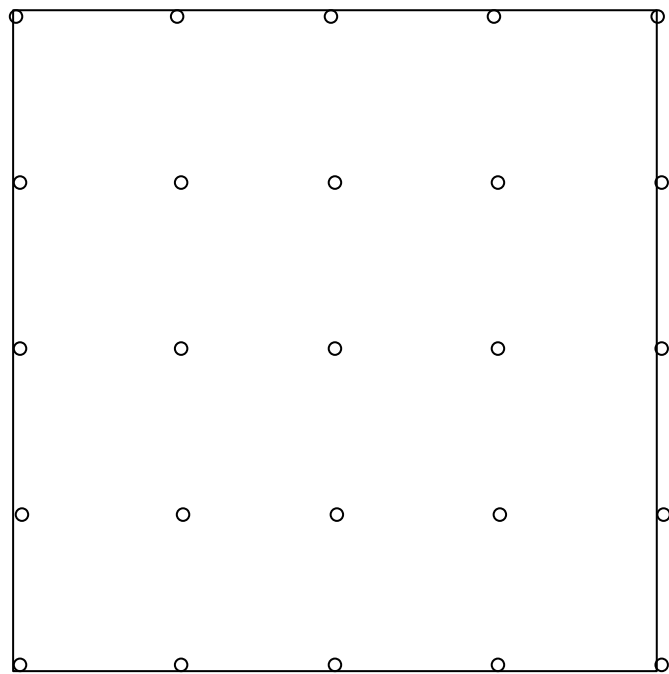
Tool One

Tool Two

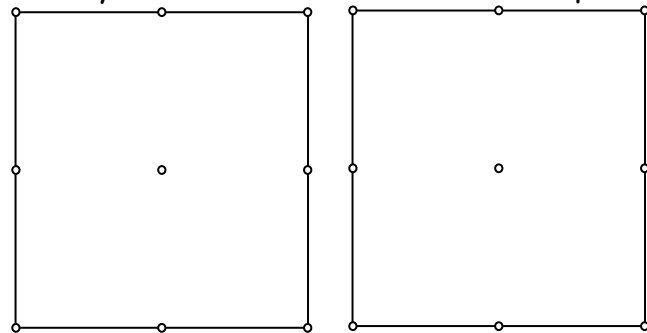


Tool One

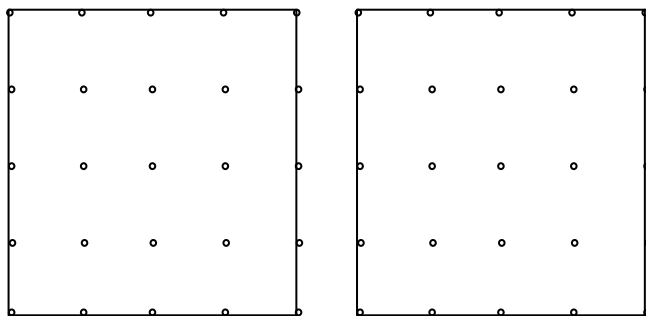
Tool Two



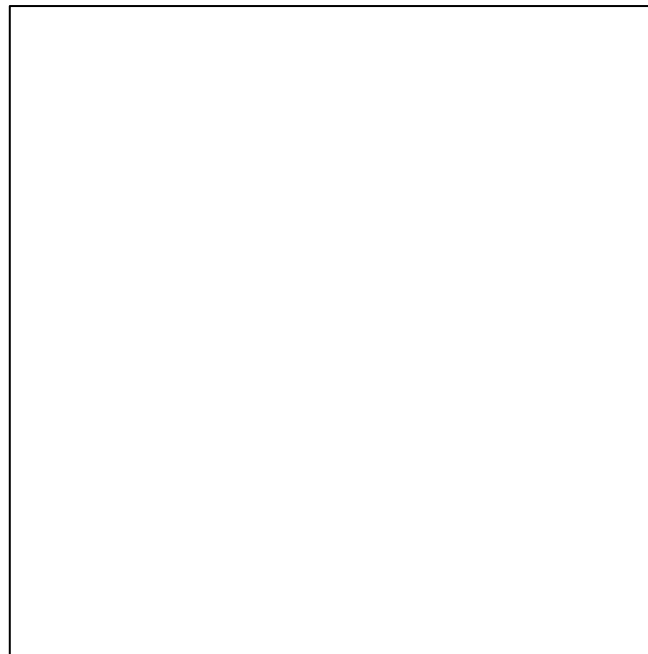
- 1) Draw two different ways to make fourths.
Use your fourths to tile the whole square.



- 2) Draw two different ways to make fourths.
Use your fourths to tile the whole square.



- 3) Fill the whole square using two different types of fourths.



- 1) Tool One: No Descriptor and 3,3
- 2) Tool Two: Descriptor and 3,4

Start

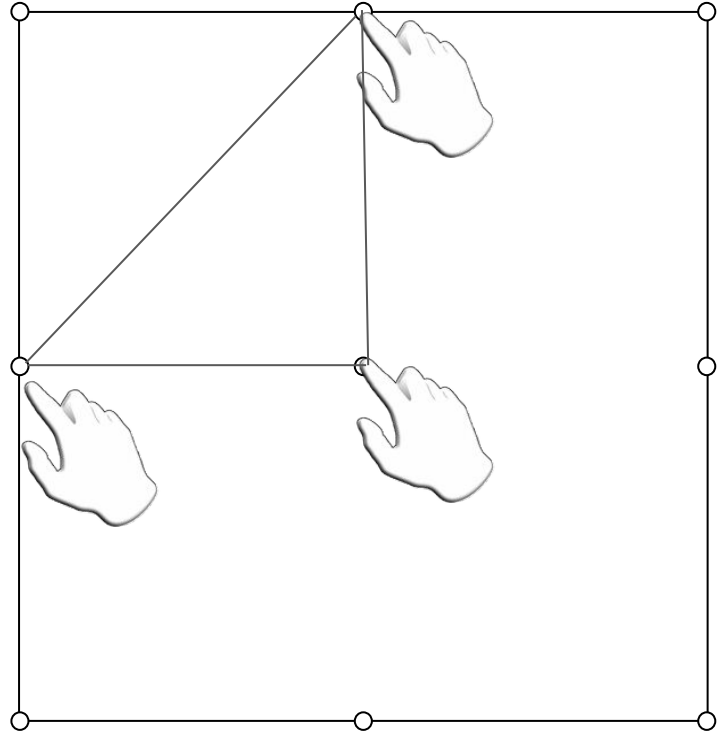
Exploration

Create your own shape!

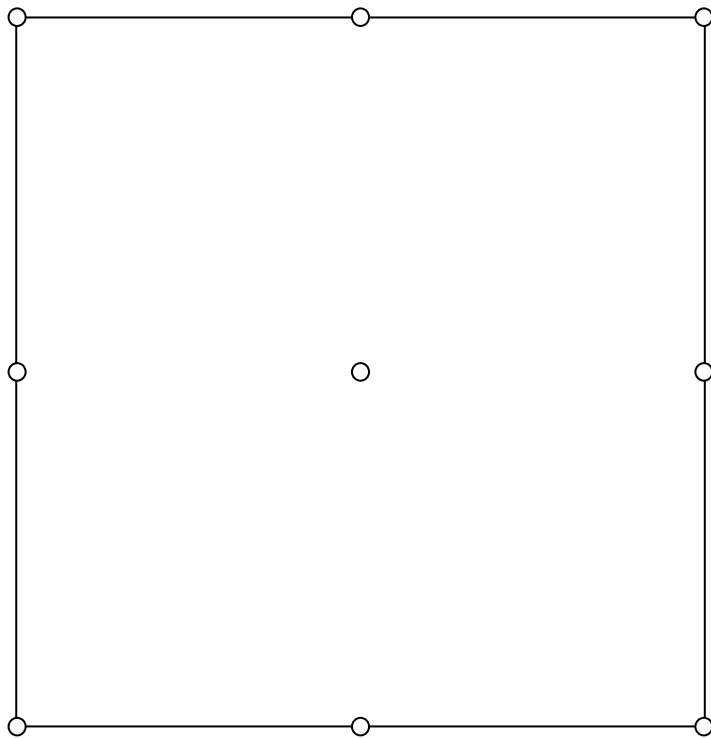
How do you delete it?

How do you rotate it?

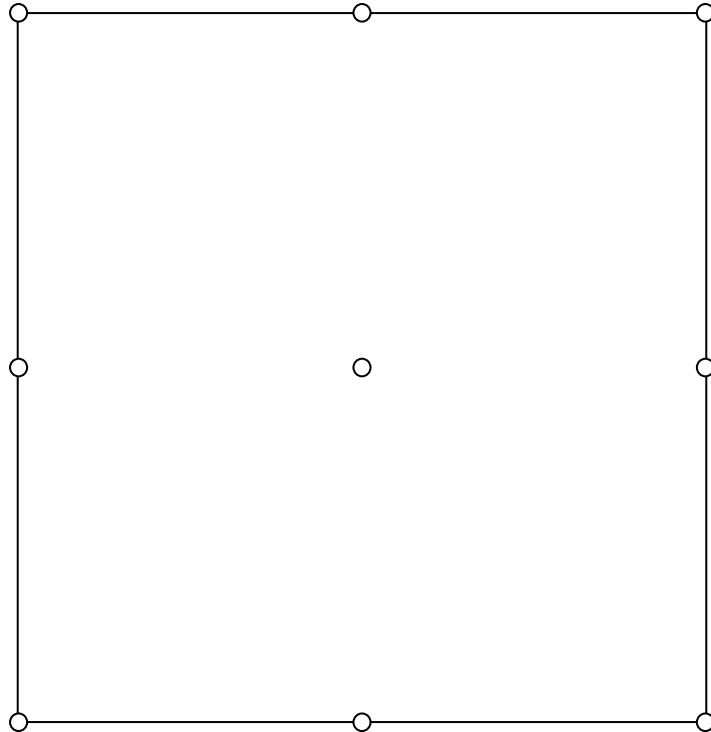
How do you flip it?



Use the tool to find two ways to make one half.



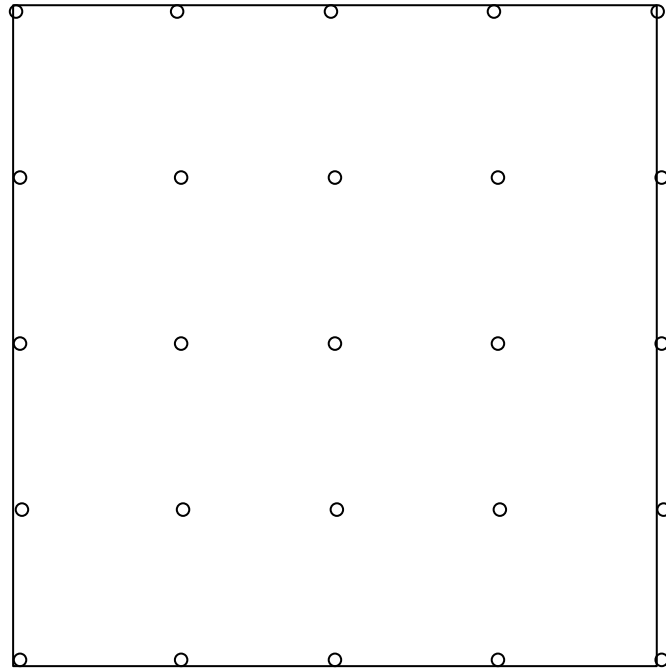
Use the tool to find two ways to make one fourth.
Record the answers on your paper.



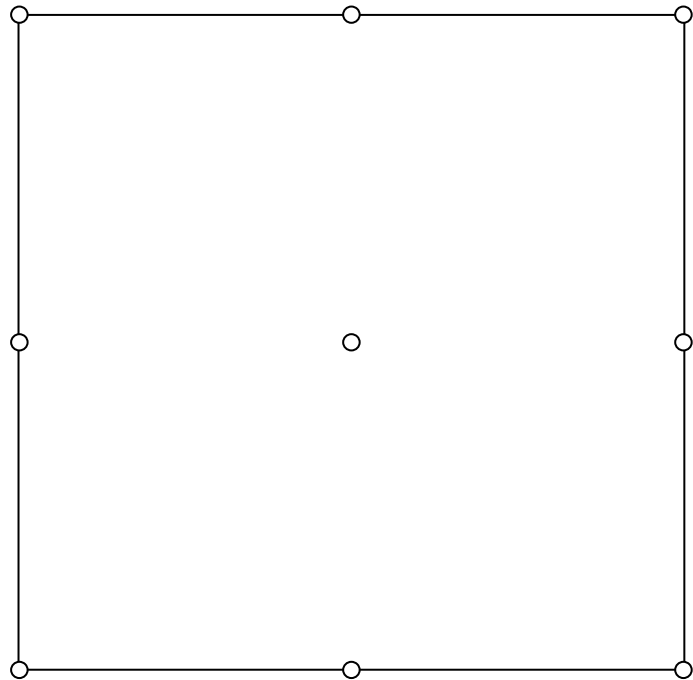
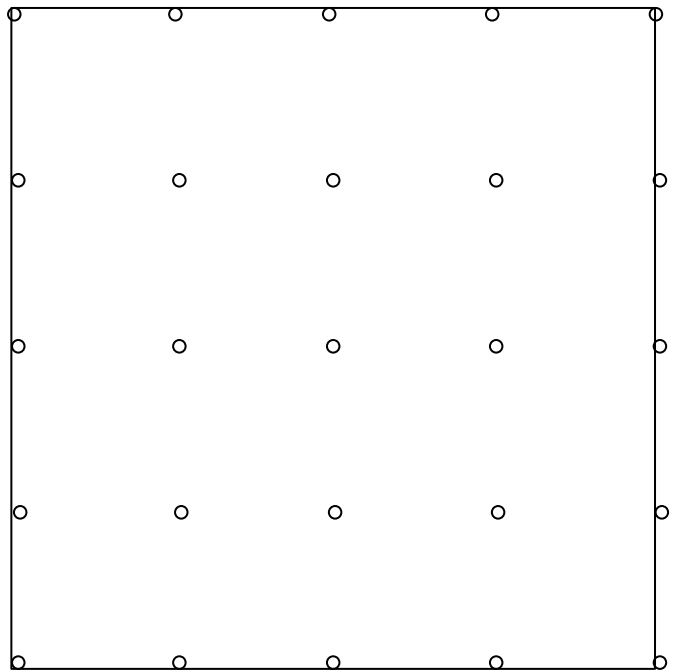
Switch Tools!

Tool One

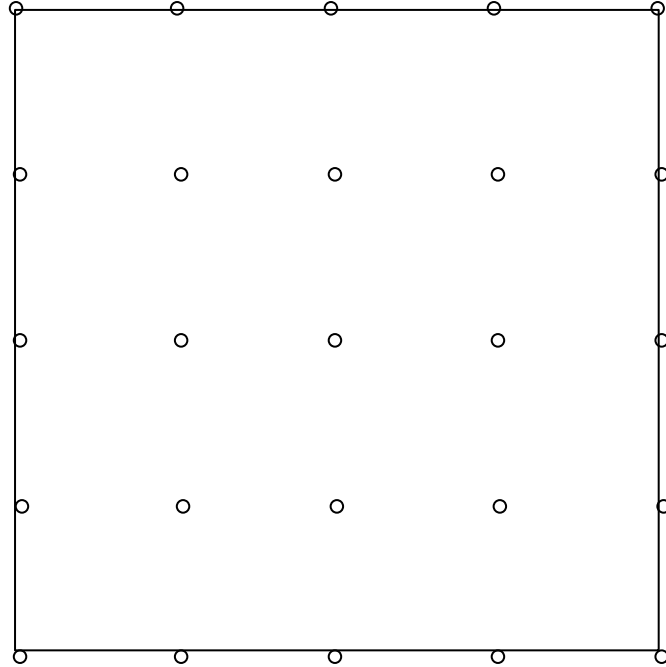
Tool Two



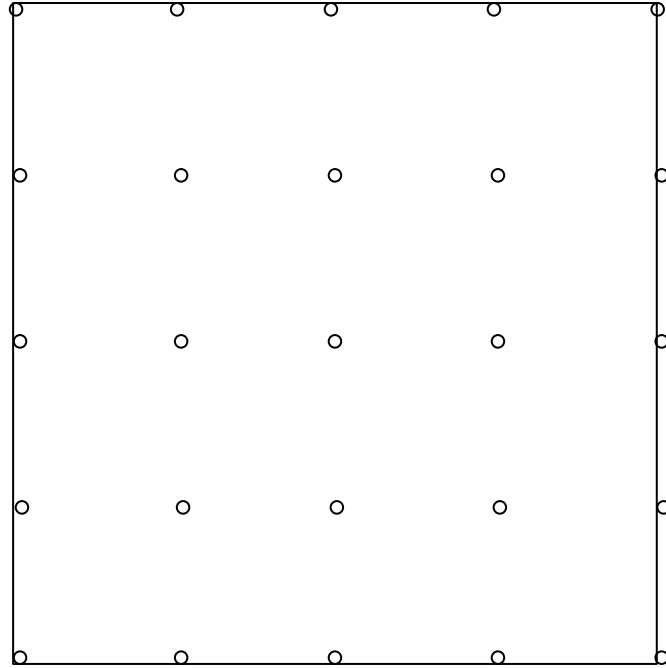
What's similar? What's different?



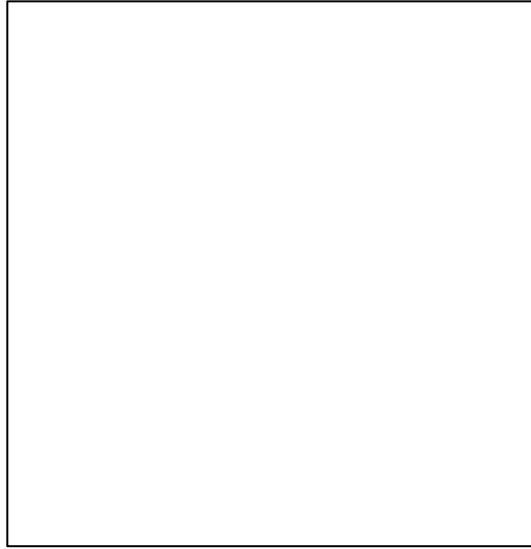
Find a brand new way to make a half.



Find two new ways to make a fourth.
Record the answer on your paper.



On your paper, tile the whole using two different types of fourths.



You can use either tool to help you.

End

Extra Slides