

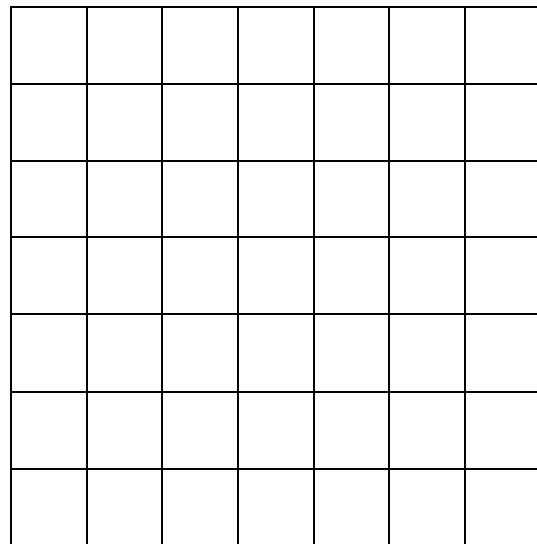
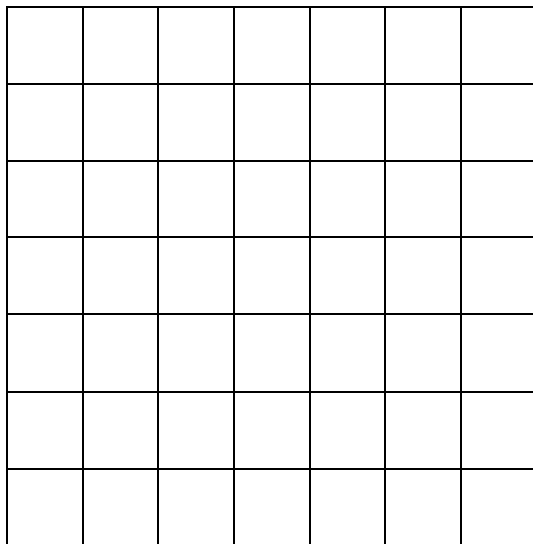
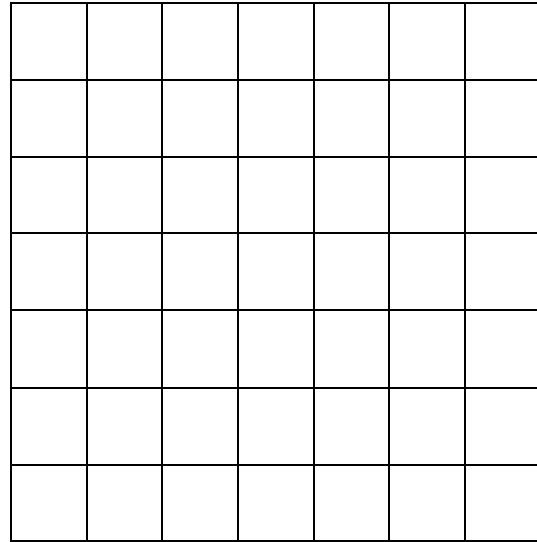
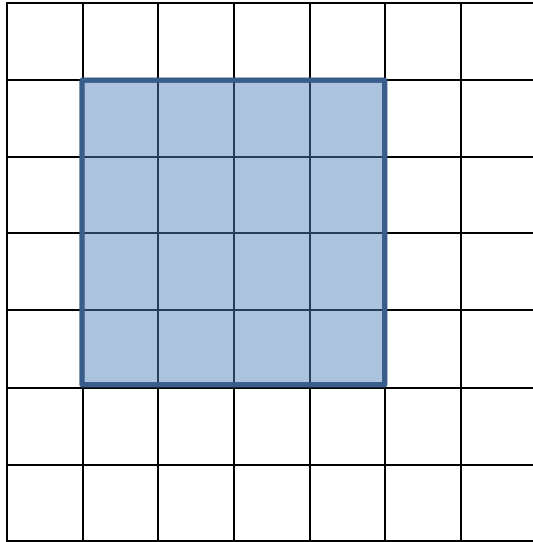
Name

Date



AREA & PERIMETER OF RECTANGLES CHALLENGE 3

Draw 3 different rectangles with the same perimeter as this square.



Find the areas of your rectangles. What do you notice?

Is it possible to find a rectangle the same perimeter as this square but a larger area? Explain your answer.

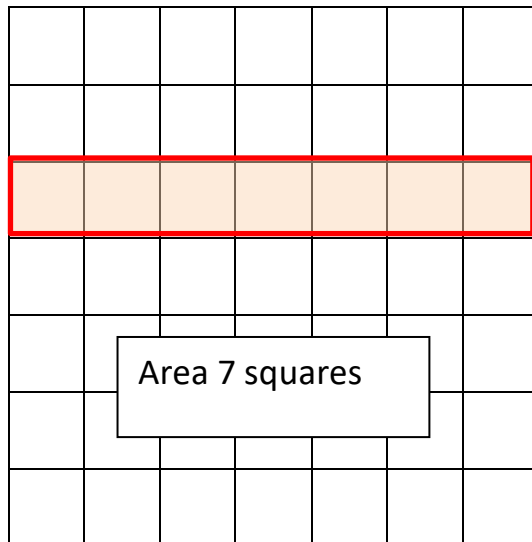
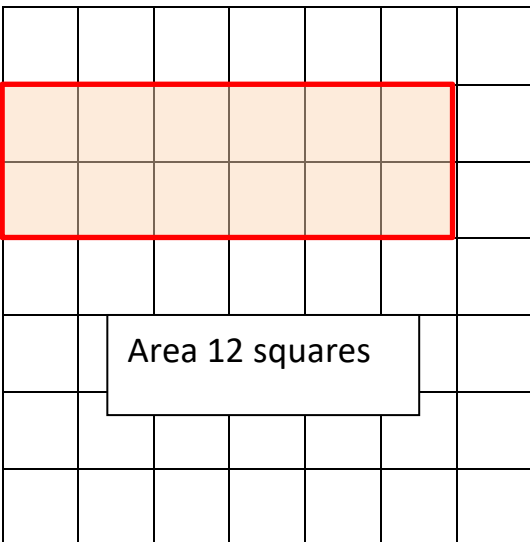
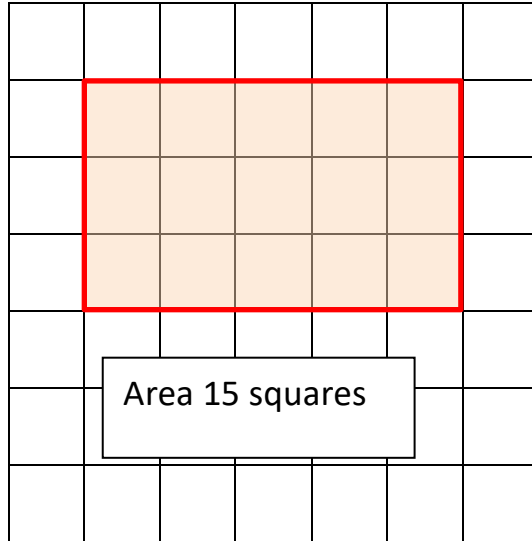
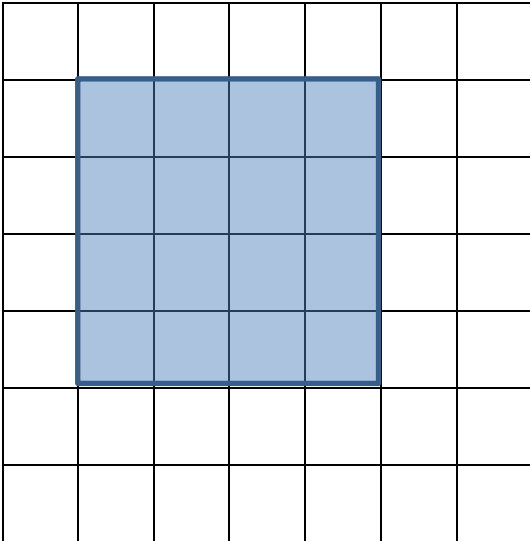
Name

Date



AREA & PERIMETER CHALLENGE 3 ANSWERS

Draw 3 different rectangles with the same perimeter as this square.



Find the areas of your rectangles. What do you notice?

The rectangles all have a smaller area than the square.

Is it possible to find a rectangle the same perimeter as this square but a larger area?

Explain your answer. It is impossible to find a rectangle with the same perimeter as the square but a larger area because the square is the most efficient shape for getting the most area from a given perimeter (using straight lines).