

# Assignment

## Write

Define each term in your own words.

1. sketch
2. draw
3. conjecture
4. auxiliary line

## Remember

Mathematicians make conjectures, test predictions, experiment with patterns, and consider arguments and different perspectives.

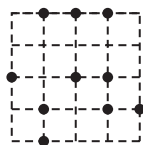
In mathematics, a statement is not true or false until it is proved to be true or false.

Formal and rigorous mathematical reasoning can involve creative thinking.

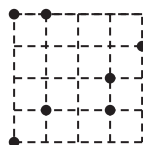
## Practice

1. A Zukei puzzle is a Japanese logic puzzle in which a grid is presented with a number of points shown at different intersections. Each grid is presented along with the name of a geometric figure. The goal of the puzzle is to determine which points on the grid are the vertices of the named geometric figure. Identify and connect the vertices that form the given shape for each grid.

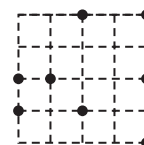
a. Rhombus



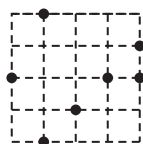
b. Isosceles Triangle



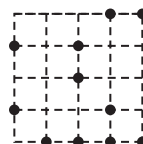
c. Parallelogram



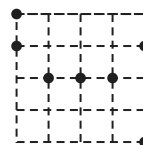
d. Trapezoid



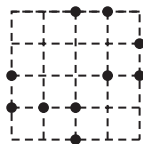
e. Rectangle



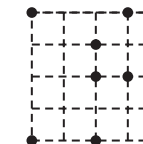
f. Isosceles Triangle



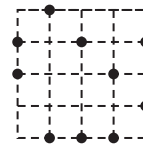
g. Square



h. Parallelogram

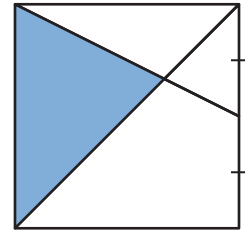


i. Rectangle



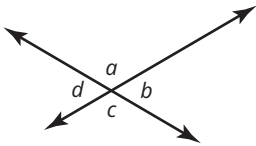
## Stretch

Determine what fraction of the square is shaded.  
Explain your reasoning.



## Review

1. Identify the vertical angles.



2. Identify the pairs of angles. Describe the measures of the angles in each pair.

- Corresponding angles
- Alternate interior angles
- Alternate exterior angles
- Same-side interior angles

