

Finding Area Using Tangrams

Standards:

- Students will be able to devise and implement strategies to correctly measure line segments and angles
- Students will be able to calculate the area and perimeter of two-dimensional figures
- Students will be able to analyze congruent figures

You have been given a set of tangrams as well a worksheet with several shapes that can be made with the tangrams. You must put together 3 different shapes of your choice, one from each set. Then, sketch the diagram in the appropriate space on the worksheet, find and label all measurements, and then find the area of the shape. There are hints for solving the tangram puzzles at the front of the room if you are stuck.

	Poor	Good	Excellent
Clearly drawn and labeled diagrams	Diagrams are missing and/or many measurements are missing or inaccurate (1 pt)	Diagrams are drawn, but some measurements are missing or inaccurate (2 pts)	Diagrams are accurately drawn and labeled with all correct measurements (3 pts)
Area correctly found	Areas are correct for 0 or 1 of the sets (0 – 3 pts)	Areas correctly found for 2 of the three sets (6 pts)	Areas of shapes correctly found for all three sets (9 pts)
Work clearly shown	Work is missing or unclear (1 pt)	Work supports answer, but some steps are missing or unclear (3 pts)	Work clearly supports answer for all area calculations (5 pts)
Accurate observation to last question	Observation is inaccurate (1 pt)		Observation is accurate (3 pts)
Answer to final question is fully supported, including information about congruent figures	Answer is not fully supported and does not include information about congruent figures (1 pt)	Explanation is present, but is not complete and does not completely explain relationship to congruence properties (3 pts)	Complete explanation, fully supported with geometry properties and includes congruence properties (5 pts)

Total score: _____ / 25