Name: _____ Date: _____

Chapter 3 Gifted and Enrichment

1. Draw a square game board. Divide the board into playing spaces by drawing parallel line segments so that • the line segments are at a 45° angle from the edges of the board • one line segment is drawn from one vertex of the board to the opposite vertex • the outside edge of the board has a border of three-sided spaces • when the three-sided spaces are removed, each edge of the board is made up of five equal-sized four-sided playing spaces. Determine how many four-sided playing spaces will be available on the board. Show how you arrived at your answer.	**2.** Draw a horizontal line segment 6 cm long, and then draw the perpendicular bisector of the line segment. Mark a point on the bisector that is 4.1 cm from the original line segment. Using this point as the centre and the original line segment as one of the sides, create a five-sided figure about this point with each side the same length as the original line segment. Determine the area of your five-sided figure, to the nearest tenth of a square centimetre.
3. Draw a parallelogram with the two longer sides 18 cm long each and the two shorter sides 10 cm long each. On your parallelogram, draw a diagonal line segment that connects one set of opposite corners and that is perpendicular to the short sides of the parallelogram. What is the area of the parallelogram, to the nearest tenth of a square centimetre?	**4.** Draw a figure with eight equal sides. Draw line segments to join each vertex to the opposite vertex. What is the size of the interior angles of each triangle formed in this figure?