Name: _____ Date: _____

BLM 1–5

# Chapter 1 Problems of the Week

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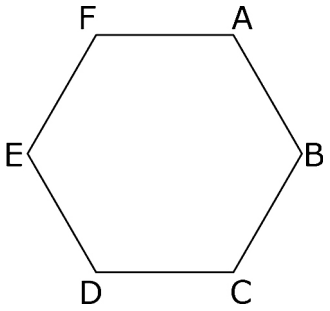
| **1.** Think of regular polygons: equilateral triangle, square, pentagon, hexagon, octagon. Imagine each of them is reflected, translated, or rotated 90°,180°, or 270° about a point on an axis. Which ones will look like they have not changed their orientation? Assume all shapes start in Quadrant 1. | **2.** The perimeter of hexagon ABCDEF is 48 cm. Find the length of line segment AD.<br>  <br> |
| **3.** A gold-plated sphere is dipped into a measuring container and the water rises 100 mL.<br>**a)** If 1 mL equals 1 $cm^3$, what is the surface area of the sphere to the nearest tenth of a centimetre?<br>**b)** If the gold plating is 1 mm thick, what is the volume of the gold covering the sphere to the nearest tenth of a cubic centimetre? | **4.** Locate images of flowers, starfish, or other natural objects that show rotational symmetry. Create a collage of your images. |