Problem 1: Set up a table for convex polygons' angle sums beginning with a triangle, followed by a quadrilateral, a pentagon, and so on. From your table, derive a formula for the measure of an interior angle in a regular n-sided polygon.

Score: /3

Problem 2: Find $x = $ [   ]. Name the triangles, like ABC and CDE and provide reasons for your claim.

6 cm

x

8 cm

10 cm
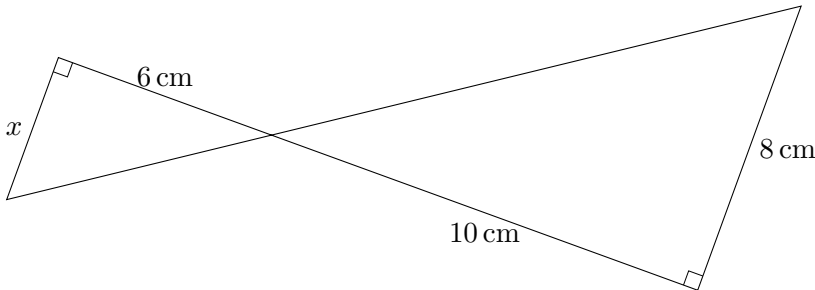
Score: /3

Problem 3: Draw the following two shapes: A square of side length 4 and a circle of radius 4. Which of the two cover more area? Does the one with a larger area have a larger perimeter? Show your work to support your claim.

Score: /4