

CONSTRUCTION GEOMETRY 9: DRAWING POLYGONS

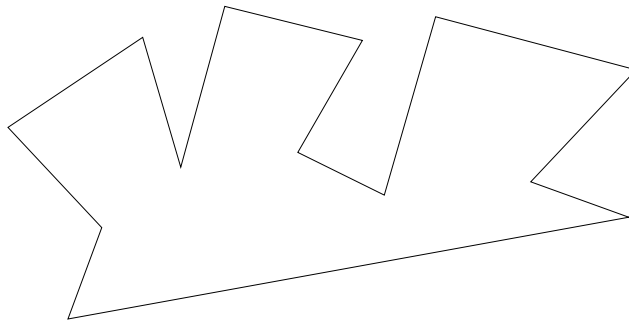
1. Draw an octagon with 6 cm sides.

2. A decagon has 10 sides.

a. Calculate the sum of its interior angles.

b. What would each angle of a regular decagon measure?

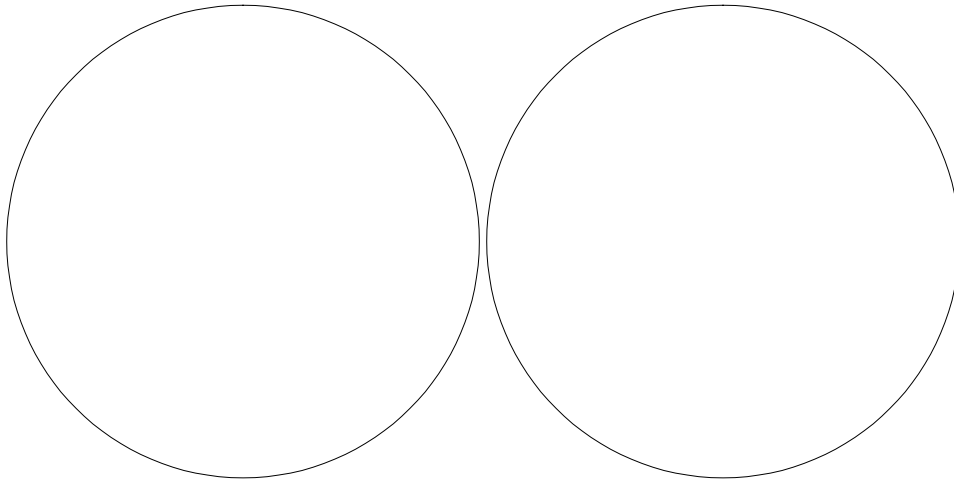
3. Without using a protractor, determine the sum of the interior angles of the polygon below.



4. Inscribe the following polygons in the given circles.

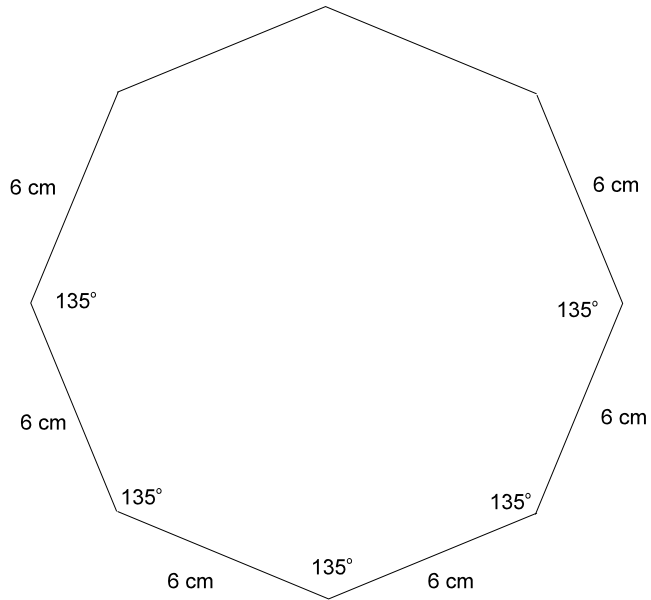
a. square

b. octagon



ANSWER KEY

1.

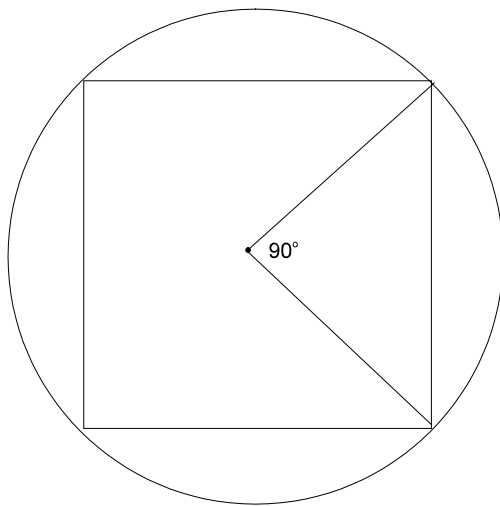


2. a.  $180^\circ \times (10 - 2) = 1440^\circ$

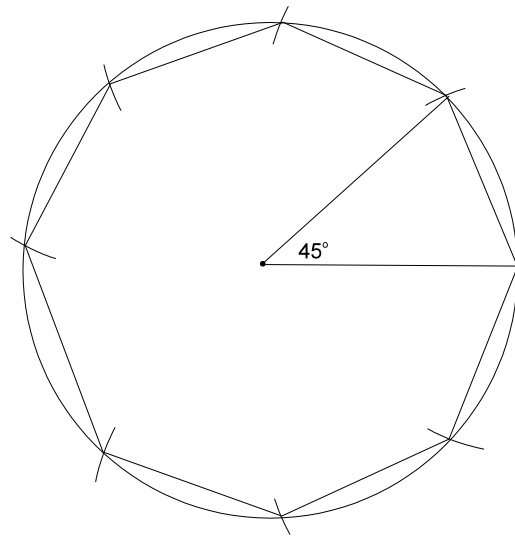
b.  $\frac{180^\circ \times (10 - 2)}{10} = 144^\circ$

3.  $180^\circ \times (13 - 2) = 1980^\circ$

4. a.



b.



Source: Government of BC used with permission.