1.

Find the sum of the measures of the angles of:

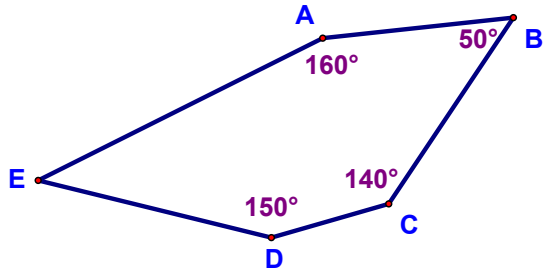a. **A quadrilateral**

c. **An octagon**

e. **A 93-gon**

2.
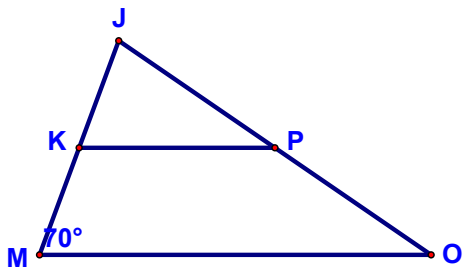
Find the m∠E

5.

Given: **K is a midpoint**   **Find:**   a. **m∠JKP**
                P is a midpoint
                m∠M = 70°
                m∠JKP = y + 15
                m∠JPK = y - 10

                                                                  b. **m∠JPK**

                                                                  c. **m∠J**

6.

Find the sum of the measures of the exterior angles, one per vertex, of each of these polygons:

a. A triangle

b. A heptagon

c. A nonagon

d. A 1984-gon

10.

How many sides does a polygon have if the sum of the measures of its angles is:

a. 900°

c. 2880°

d. (180x - 720)°

e. 436°

13.

What are the names of the polygons that contain the following numbers of diagonals?

a. 14

b. 35

c. 209

14.

Tell whether each statement is true Always, Sometimes, or Never (A, S, or N).

a. As the number of sides of a polygon increases, the number of exterior angles increases.

b. As the number of sides of a polygon increases, the sum of the measures of the exterior angles increases.

c. The sum of the lengths of the diagonals of a polygon is greater than the perimeter of the polygon.

d. The sum of the measures of the angles of a polygon formed by joining consecutive midpoints of a polygon's sides is equal to the sum of the measures of the angles of the original polygon.

23.

Seven of the angles of a decagon have measures whose sum is 1220. Of the remaining three angles, exactly two are complementary and exactly two are supplementary. Find the measures of these three angles.