

## MATH 230 Session 11 Group Work

Let  $D_n$  = the number of diagonals for an  $n$ -gon (polygon with  $n$  sides)

Find the number of diagonals for a dodecagon (12-gon)? Next, develop a rule for determining the number of diagonals for any polygon. In particular develop a formula for determining  $D_n$  when given a value for  $n$ .

**Understand the Problem:**

- a. What is a diagonal of a polygon?
  
- b. Show how to determine  $D_4$  and  $D_5$ .

**Make a Plan:** How will you proceed to address this problem?

**Carry Out Your Plan:**

**Look Back:**