

# A New Look at Boxing

## Activity 2 Notes Day 2

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Hr: \_\_\_\_\_

### *Activity 2 Discussion Questions:*

1. How can you use the table to determine which regular polygons tessellate the plane?
2. Identify the regular polygons that tessellate the plane. Explain your answer!
3. What is the measure of the exterior angle of a polygon with  $n$  sides?
4. What is the measure of an interior angle of a regular polygon with  $n$  sides?
5. If you knew the number of degrees in an interior angle of a regular polygon, how could you determine the number of sides of the polygon?

### *Examples:*

1. Consider a regular polygon with 40 sides.
  - a. Find the measure of an interior angle.
  - b. Find the sum of the measures of the interior angles.
2. Find the measure of an interior angle of a regular polygon with 105 sides.
3. What is the biggest polygon that will tessellate the plane?

4. A box manufacturer wishes to cut templates from a roll of cardboard 200cm wide and 5000cm long. The dimensions of the smallest rectangle that will enclose the template are 11.2cm and 15.4cm. How many templates can be cut from one roll?

