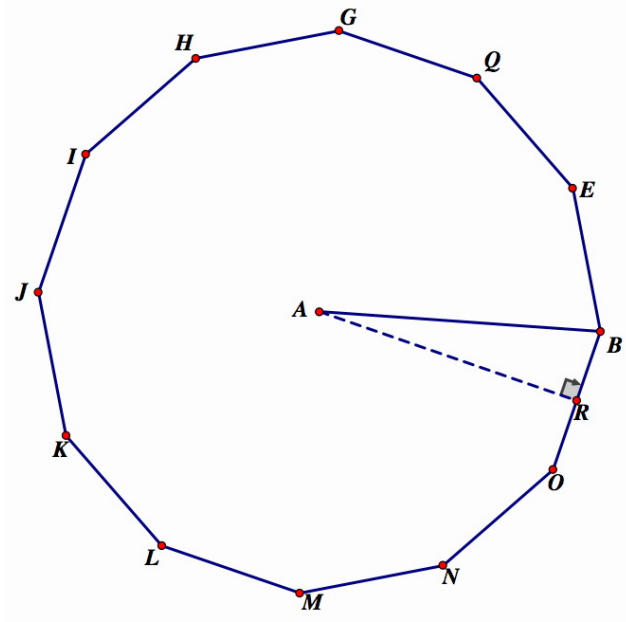


Name: _____ Note: 3 decimal places in your answers!



1. What kind of regular polygon is polygon BONMLKJIHGQE ? _____

2. AB is the _____

3. AR is the _____

4. If $AB = 6$, then:

a) Find the length of BO

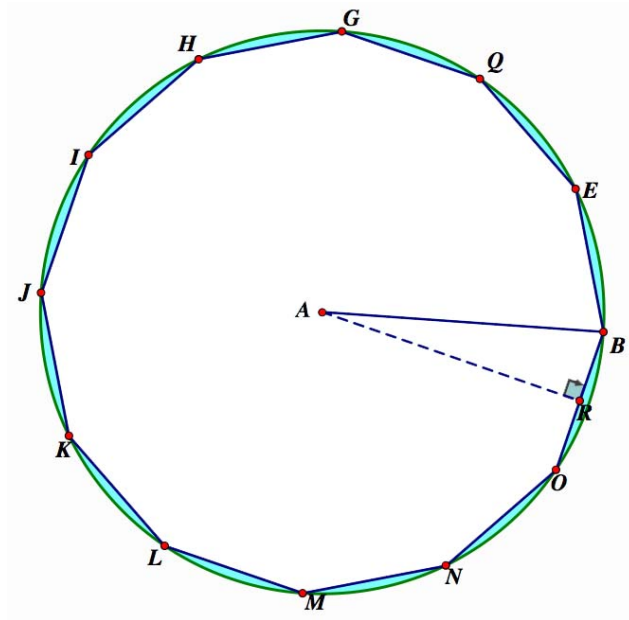
b) Find the perimeter of the polygon

c) Find the length of AR

d) Find the area of the polygon.

question 4 continued:

Consider the circle that I have drawn around the polygon:



Using the information you already have in the beginning of question 4,

- d) What is the measure of the radius of the circle?
- e) What is the area of the circle ?
- f) What is the area of the shaded region: the stuff between the polygon and the circle.

For the rest of these questions, the polygons are too hard to draw and I am too lazy to do it:

5. Consider regular 30-gon with radius 10 . Find the:

Apothem: _____

Side: _____

Perimeter: _____

Area: _____

6. Consider a regular 60-gon with radius 10 . Find the:

Apothem: _____

Side: _____

Perimeter: _____

Area: _____

7. Consider a regular 180-gon with radius 10. Find the:

Apothem: _____

Side: _____

Perimeter: _____

Area: _____

8. Consider a regular 360-gon with radius 10. Find the:

Apothem: _____

Side: _____

Perimeter: _____

Area: _____

9. Consider a regular 3600-gon with radius 10. Find the:

Apothem: _____

Side: _____

Perimeter: _____

Area: _____

10. Find the perimeter and the area of a circle with radius 10. Please give your answer with decimals.. in other words, use your calculator and don't leave it as something like 120π .