Angles and Arcs of Circles Worksheet:

1) In circle O, radii OA and OB are drawn. Central angle AOB measures 68. The measure of arc AB is

a) 34 b) 68 c) 112 d) 136

2) In circle O, radii OA and OB are drawn. If arc AB measures 122, the measure of <AOB is

a) 58 b) 61 c0 122 d) 244

For problems 3 & 4, in circle O below, radii OA and Ob and chords AC and BC are drawn.

3) If the measure of arc AB is 86, the measure of <ACB equals

a) 43 b) 62 c) 86 d) 172

4) If the measure of arc AB = 86, the measure of <AOB is

a) 43 b) 62 c) 86 d) 172

5) If a central angle and an inscribed angle intercept the same arc, the ratio of the measurement of the central angle to the measure of the inscribed angle is

a) 1:1 b) 2:1 c) 1:2 d) 2:2

6) Triangle XYS is inscribed in circle O. If the measure of <XYZ is 67 and the measure of arc XY is 144, which of the following is the measure of <ZXY?

a) 82 b) 162 c) 108 d) 41

7) In the diagram of circle O below, diameters AOB and COD are drawn as well as chords AC, BC, and DB. The measure of <ACD is 32 and the measure of arc AC is 116.

Find:

a) arc AD b) arc BD c) arc BC d) <AOC e) <ABD f) <CDB
g) <BOD h) <ACB