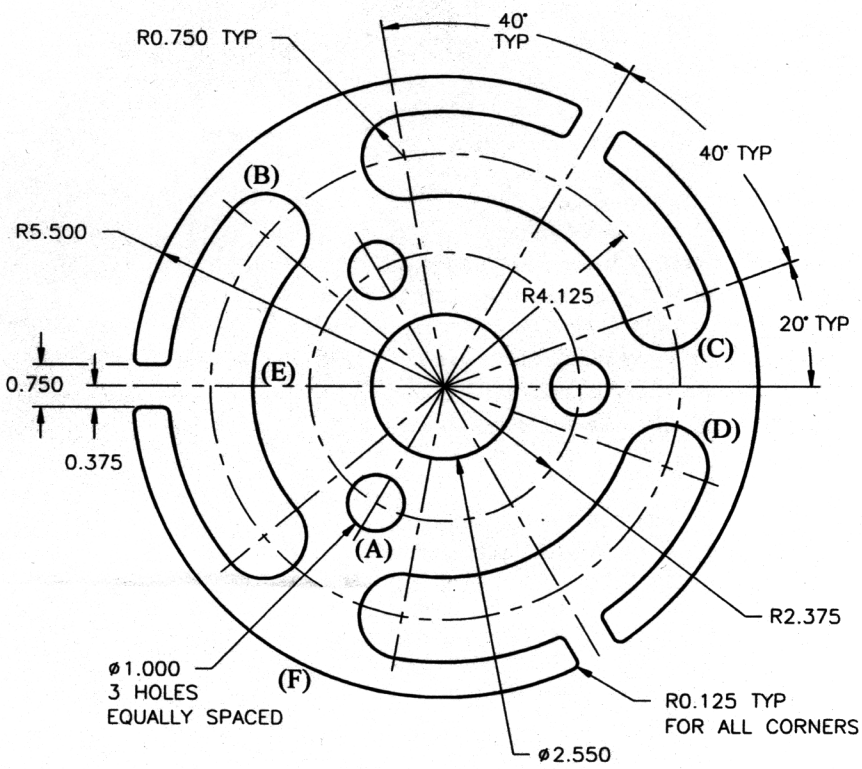
Problem 6-27
Rotor2.Dwg

Directions for Rotor2.Dwg
Start a new drawing called Rotor2. Keep the default settings of decimal units but change the number of decimal places past the zero from 4 to 3. Be sure the system of angle measure is set to decimal degrees and the number of decimal places for the display of angles is zero (0). Keep all remaining default unit values.

Begin by constructing the 2.550 diameter circle at absolute coordinate (11.125,9.225).



Refer to the drawing of Rotor2 above to answer the following questions:

1. The absolute coordinate value of the center of hole "A" is closest to
   (A) 9.937,7.158
   (B) 9.937,7.163
   (C) 9.937,7.168
   (D) 9.942,7.168
   (E) 9.947,7.173

2. The perimeter of Rotor2 is
   (A) 81.850
   (B) 81.855
   (C) 81.860
   (D) 81.865
   (E) 81.870

3. The distance from the center of arc "B" to the center of arc "C" is
   (A) 7.125
   (B) 7.130
   (C) 7.135
   (D) 7.140
   (E) 7.145

4. The absolute coordinate value of the center of arc "D" is closest to
   (A) 15.001,7.814
   (B) 15.001,7.819
   (C) 15.001,7.824
   (D) 15.006,7.829
   (E) 15.011,7.834

5. The total length of arc "F" is
   (A) 10.474
   (B) 10.479
   (C) 10.484
   (D) 10.489
   (E) 10.494

6. The total area of Rotor2 with all four holes removed is
   (A) 54.902
   (B) 54.907
   (C) 54.912
   (D) 54.917
   (E) 54.922

7. Change the diameter of all three 1.000 diameter holes to 0.700 diameter. Change the diameter of the 2.550 hole to a new diameter of 1.625. The new area of Rotor2 with all four holes removed is
   (A) 59.122
   (B) 59.127
   (C) 59.132
   (D) 59.137
   (E) 59.142