

7. Jack and Jill both start at point A. They each walk in a straight line at an angle of  $105^\circ$  to each other. After 45 minutes Jack has walked 4.5km and Jill has walked 6km. How far apart are they?

52. A parallelogram has sides of length 16 units and 10 units. The shorter diagonal is 12 units. Find the measure of the longer diagonal.

55. A regular octagon is inscribed in a circle with a radius of 8 inches. (See Figure 12.) Find the perimeter of the octagon.

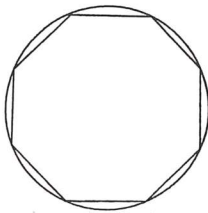


Figure 12

56. A regular pentagon is inscribed in a circle of radius 12 cm. (See Figure 13.) Find the perimeter of the pentagon. Round to the nearest tenth of a centimeter.

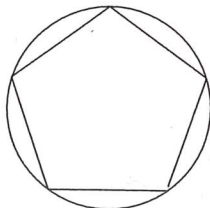


Figure 13