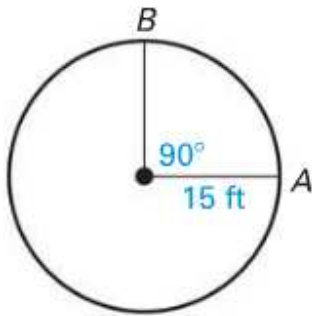


Name: \_\_\_\_\_ Date: \_\_\_\_\_

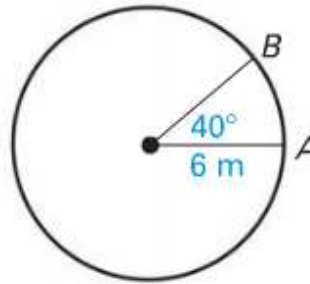
**Arc Length Homework**

Find the length of  $\widehat{AB}$ .

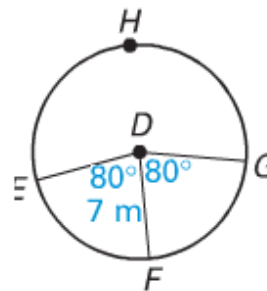
1)



2)

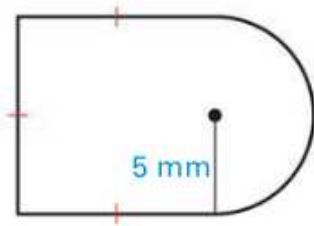


3) Find the length of  $\widehat{FG}$ .



4) Find the length of  $\widehat{EHG}$ .

5) Find the perimeter.



6) Convert the following degree measures to radians.

a)  $30^\circ$

b)  $60^\circ$

c)  $210^\circ$

7) Convert the following radian measure to degree measures.

b)  $\frac{2\pi}{3}$

b)  $\frac{3\pi}{4}$

c)  $\frac{\pi}{6}$

**Word Problems:**

8) Mrs.Noonan ran 4 times around a circular track that has a radius of 40 meters. What's the total distance she ran?

For questions 9 – 10, use the clock below.



9) How many degrees does the minute hand move in 30 minutes? 40 minutes? 60 minutes?

10) If the minute hand is 4 inches long, what is the arc length covered by the minute hand in 40 minutes?

11) A pie is cut into 6 equal pieces. The arc length of 1 piece of pie is 5.4 cm. What is the diameter of the pie?