

Name: \_\_\_\_\_ Period: \_\_\_\_\_

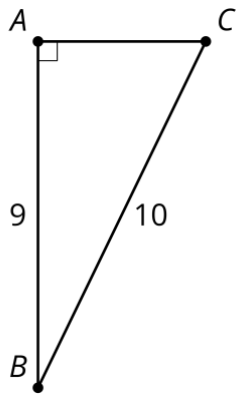
## Classwork: Unit 4 Lessons 9 & 10

### Lesson 9: Using Trigonometric Ratios to Find Angles

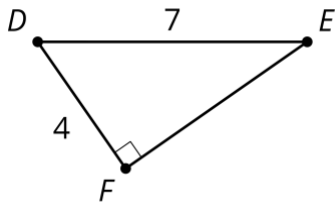
#### 9.2: From Ratios to Angles

Find all missing side lengths and angle measures.

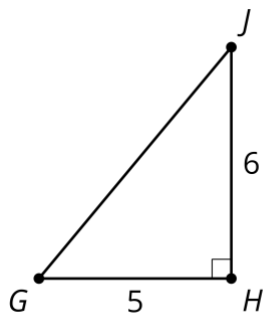
a.



b.



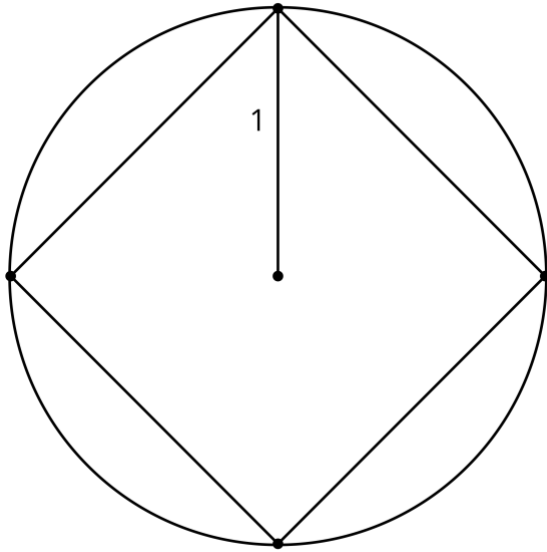
c.



## Lesson 10: Solving Problems with Trigonometry

### 10.2: Growing Regular Polygons

1. Here is a square inscribed in a circle with radius 1 meter. What is the perimeter of the square? Explain or show your reasoning.



2. What is the perimeter of a regular pentagon inscribed in a circle with radius 1 meter? Explain or show your reasoning.
3. What is the perimeter of a regular decagon inscribed in a circle with radius 1 meter? Explain or show your reasoning.
4. What is happening to the perimeter as the number of sides increases?