Independent Practice: **MORE ARC LENGTH & AREA OF SECTORS**

NAME: _____ DATE:_____ PERIOD:_____

The sector AOB is described by m∠AOB and the radius of circle O. Find the length of arc AB. Leave answers in terms of π.

1. Arc Length = _____ m∠AOB = 240° and r = 12

- -

2. Arc Length = _____ m∠AOB = 108° and r = 10

- -

The sector AOB is described by m∠AOB and the radius of circle O. Find the area of sector AOB. Leave answers in terms of π.
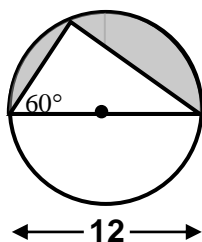
3. Sector Area = _____ m∠AOB = 30° and r = 6

- -

4. Sector Area = _____ m∠AOB = 240° and r = 9

- -

5. Sector Area = _____ m∠AOB = 108° and r = 10

Find the area of each shaded region below.

6. Area = _____

←—— **12** ——→

- -

7. Area = _____

- -
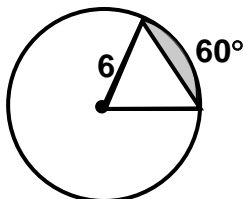
8. Area = _____

- -
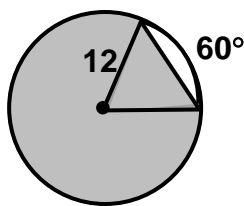
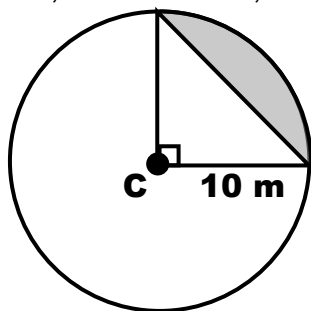**REAL LIFE SITUATIONS -** Find the correct answer for each of the following. Clearly circle or bubble in your answer as necessary. *Work must be shown in order to receive credit*.

9. A circle, shown below, has center C.

What is the area of the shaded region?

A. 28.5 square meters

B. 78.5 square meters

C. 214 square meters

D. 264 square meters