

Name: _____

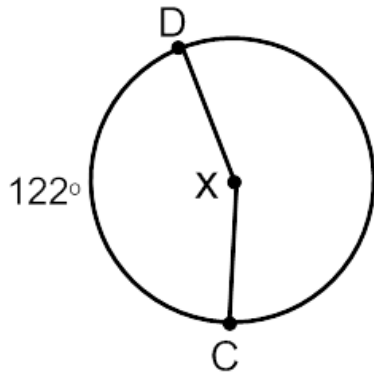
Date: _____ Period: _____

SECONDARY MATH II
Module 7 Test Review: Circles

Directions: Show ALL work. Round any decimals to one decimal place, unless otherwise stated.

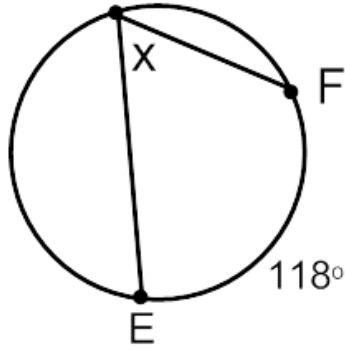
For 1-3: Determine what x equals in each circle below.

1.



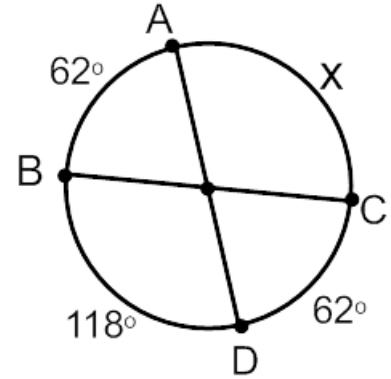
X = _____

2.



X = _____

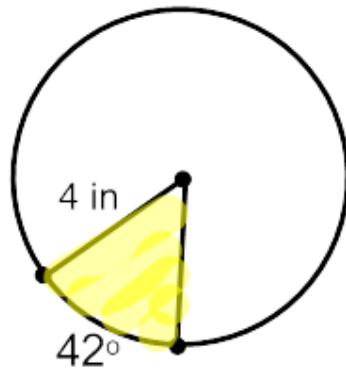
3.



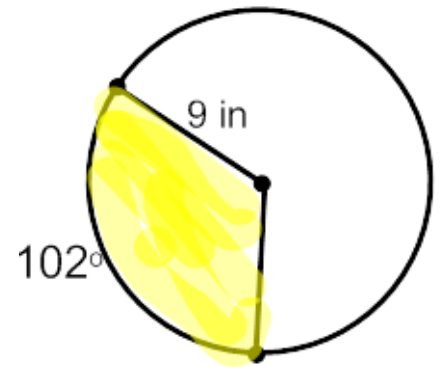
X = _____

For 4-5: Find the area of the shaded sector below using the area of a sector formula, $A = \frac{\theta}{360}(\pi r^2)$.

4.

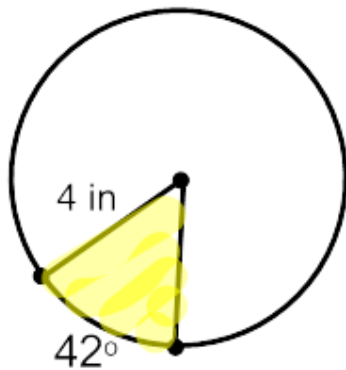


5.

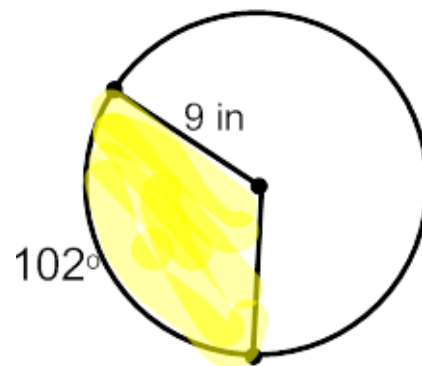


For 6-7: Find the arc length of the shaded sector below using the arc length formula, $s = \frac{\theta}{360} (2\pi r)$.

6.



7.



For 8-10: Convert each angle measure from degrees to radians. Round your answer to three decimal places if necessary. Use either $\frac{\pi}{180^\circ}$ or $\frac{180^\circ}{\pi}$ to convert.

8. 75°

9. 112°

10. 22°

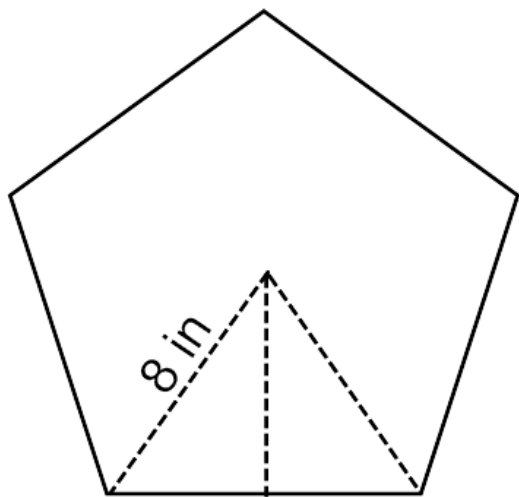
For 11-13: Convert each angle measure from radians to degrees. Round your answer to one decimal place if necessary. Use either $\frac{\pi}{180^\circ}$ or $\frac{180^\circ}{\pi}$ to convert.

11. $\frac{\pi}{6}$

12. $\frac{2\pi}{3}$

13. $\frac{\pi}{9}$

For 14-15: Use the regular pentagon below to answer the questions. Formulas:



Area of a regular polygon:

$$A = \frac{1}{2}Pa, \text{ where}$$

*P = perimeter of polygon and
a = apothem*

$$\sin\theta = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos\theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan\theta = \frac{\text{opposite}}{\text{adjacent}}$$

Pythagorean Theorem: $a^2 + b^2 = c^2$

14. What is the measure of one of the 5 central angles of this regular pentagon?

15. What is the measure of the apothem?

16. What is the measure of one of the 5 side lengths of this regular pentagon?

17. What is the Perimeter of this regular pentagon?

18. What is the area of this regular pentagon?