**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

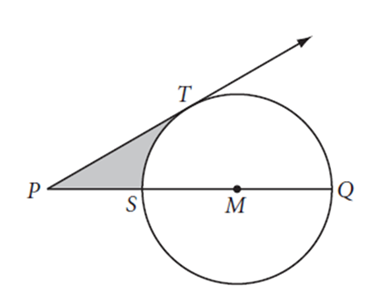
**Unit 8 Practice Test**

**Circles**

**Part A – Circles & the Pythagorean Theorem**

1. Find the area of the shaded region.





1. Find the area of the shaded region.

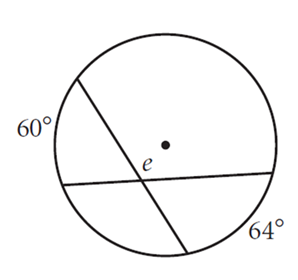
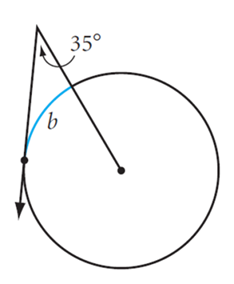
*SQRE* is a square and *SQ* = 6m.



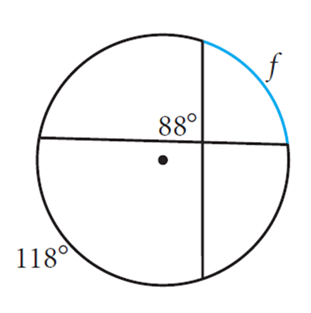
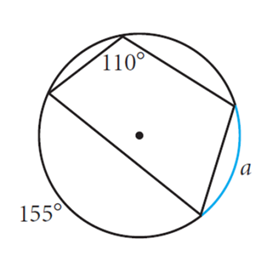
**Part B – Equations of Circles**

1. The equation of a circle is . Identify the center and radius of the circle. Show your work to justify your answer.
2. Write the equation of a circle in standard form whose diameter has endpoints (4, -1) and (-6, 7). Rewrite the equation in general form. Show all of your work!

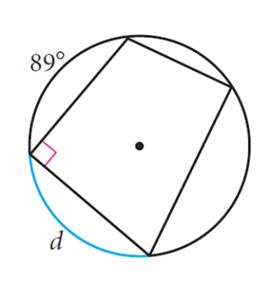
Standard Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ General Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

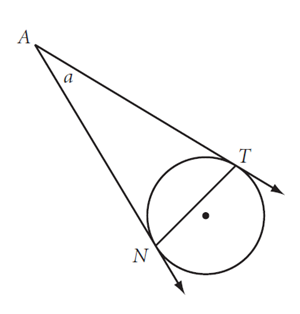
**Part C – Solving For Parts of a Circle**

1.  **6.** 

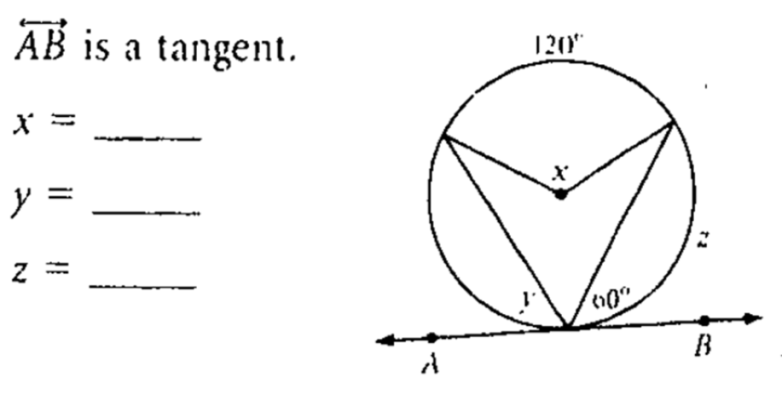
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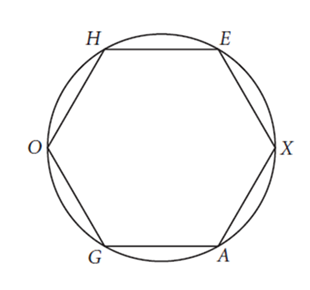
**7**.  **8.** 



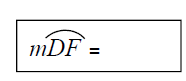
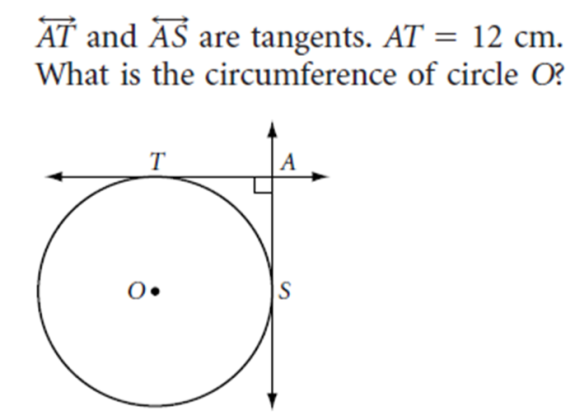
1.  **10**. 

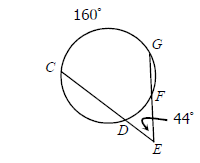


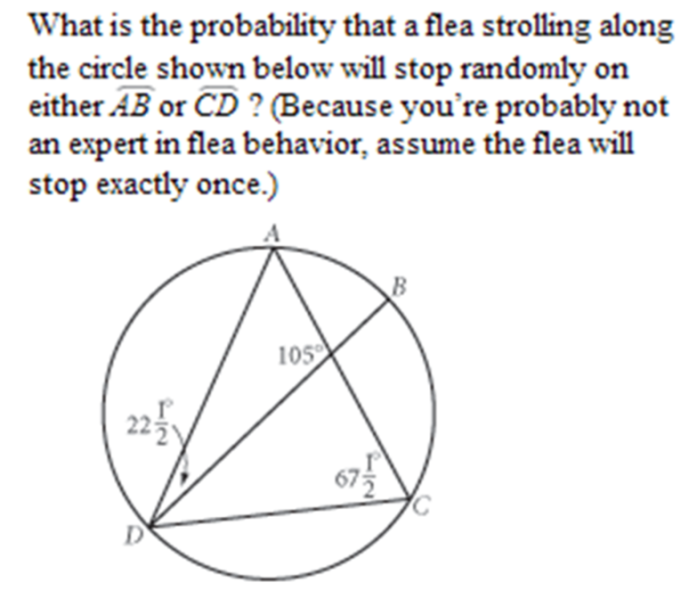
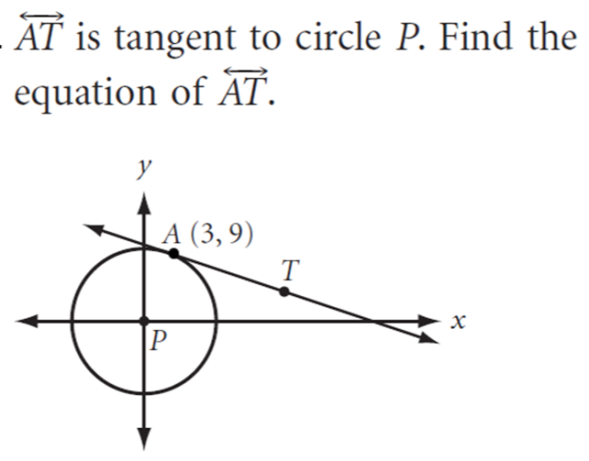


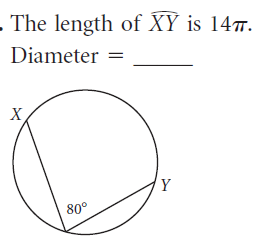
**11.** **12.** HEXAGO is a regular hexagon inscribed in a circle.

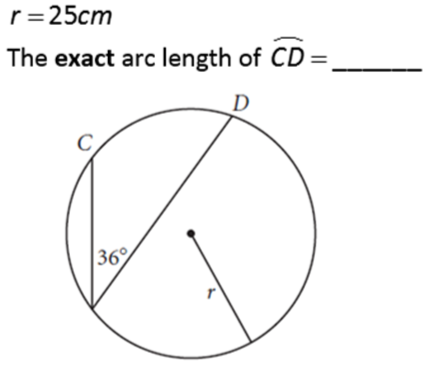


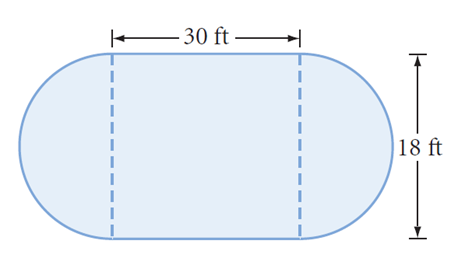
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 **13. 14.**

** 15. 16.**

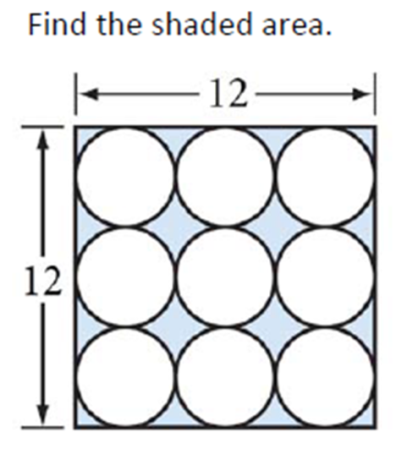
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 **17. 18.**

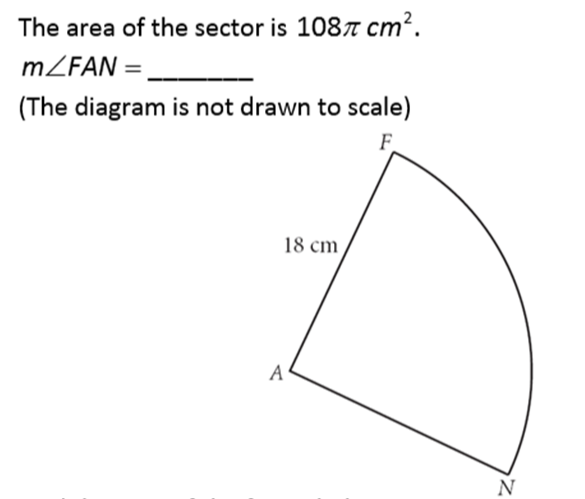
**19.** Pool contractor Peter Tileson needs to determine the number of 1-inch tiles to put around the edge of a pool. The pool is a rectangle with two semicircular ends as shown. How many tiles will be needed?

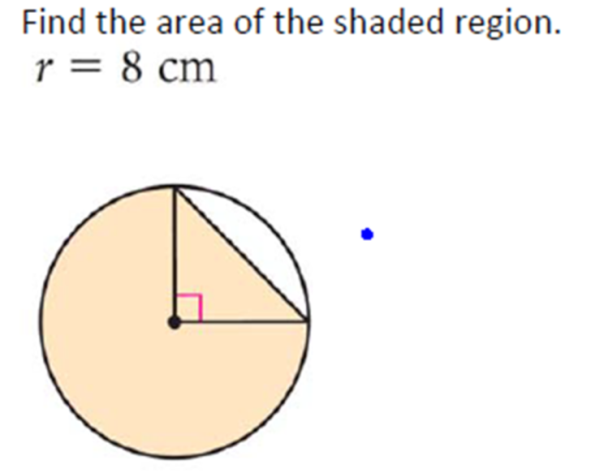
1.  Points A, B and C lie on the circumference of the circle centered at O. If and , what is the measure of ? **Hint: You will need to draw something in on the diagram**

**Part D – Areas of Shaded Regions**

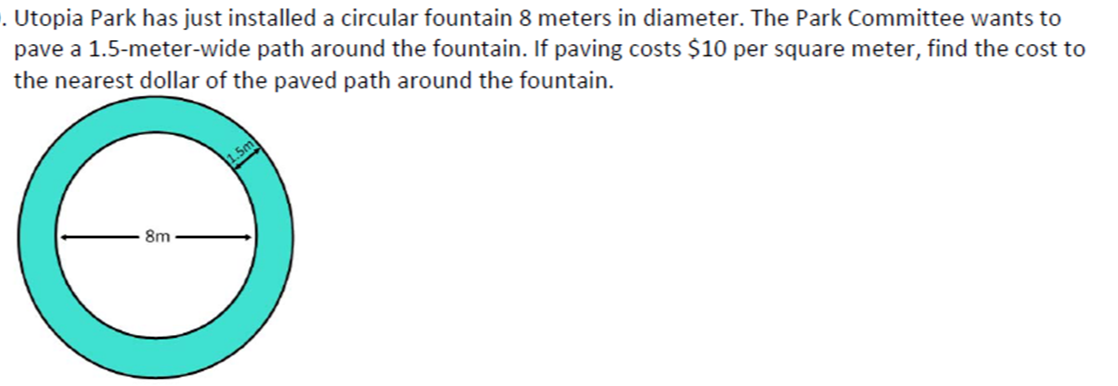


1. **22.**

****

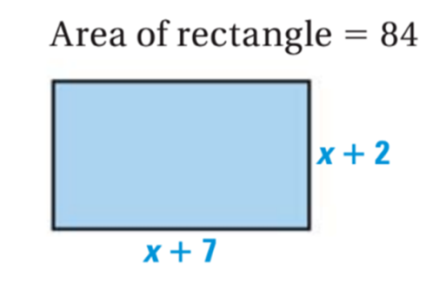
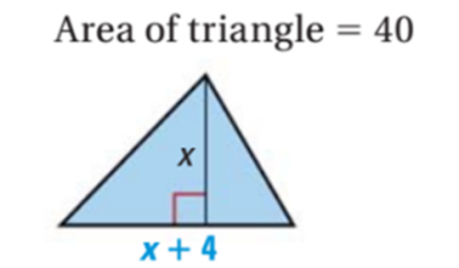
1.  **24.**



**25.**

**Part E – Solving Equations**

**26.** Set up an equation and **solve by factoring**. **27.** Set up an equation and **solve by completing the**

** square.**