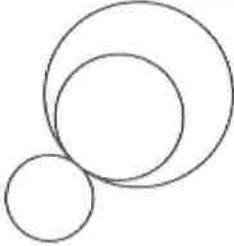


**Geometry Lessons 10.1-10.2 Homework Check**

**Multiple Choice**

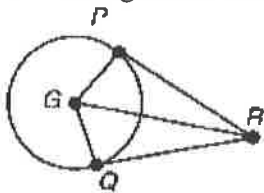
Identify the choice that best completes the statement or answers the question.

\_\_\_\_ 1. How many common tangents do the circles have?



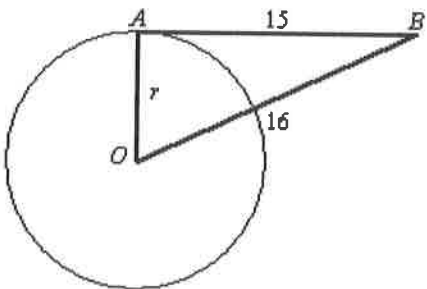
- a. 0
- b. 1
- c. 2
- d. 3
- e. 4

\_\_\_\_ 2.  $\overline{RP}$  is tangent to  $\odot G$  at  $P$ .  $\overline{RQ}$  is tangent to  $\odot G$  at  $Q$ . Choose the statement that is NOT true.



- a.  $\angle GRP \cong \angle GRQ$
- b.  $\angle PGR \cong \angle QGR$
- c.  $\overline{PR} \cong \overline{QR}$
- d.  $\angle GPR$  is obtuse.

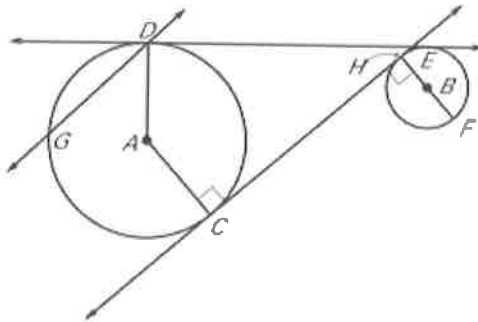
\_\_\_\_ 3. You are standing at point  $B$ . Point  $B$  is 16 feet from the center of the circular water storage tank and 15 feet from point  $A$ .  $\overline{AB}$  is tangent to  $\odot O$  at  $A$ . Find the radius of the tank.



- a. 31
- b.  $\approx 0.97$
- c.  $\approx 5.8$
- d.  $\sqrt{31}$

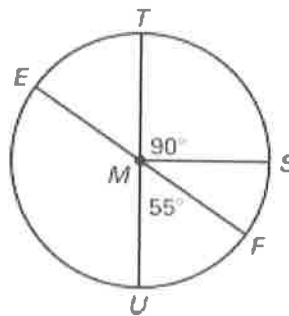
**Short Answer**

Use the diagram.



1. Name a point of tangency. \_\_\_\_\_
2. Name a center. \_\_\_\_\_
3. Name a diameter. \_\_\_\_\_
4. Name a chord. \_\_\_\_\_
5. Name a secant. \_\_\_\_\_
6. Name a tangent. \_\_\_\_\_
7. Name a radius. \_\_\_\_\_

$\overline{EF}$  and  $\overline{TU}$  are diameters of  $\odot M$ . Find the indicated measure.



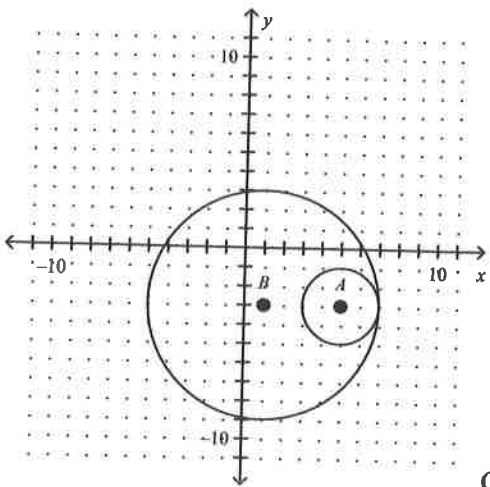
8.  $m\widehat{ET}$  \_\_\_\_\_
9.  $m\widehat{SF}$  \_\_\_\_\_
10.  $m\angle EMS$  \_\_\_\_\_

11.  $m\widehat{TSF}$  \_\_\_\_\_

12.  $m\angle SMU$  \_\_\_\_\_

13.  $m\angle EMU$  \_\_\_\_\_

14. Give the center and radius of circle A and circle B. Describe the intersection of the two circles and describe all common tangents.

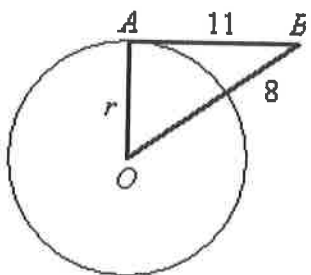


Circle A \_\_\_\_\_

Circle B \_\_\_\_\_

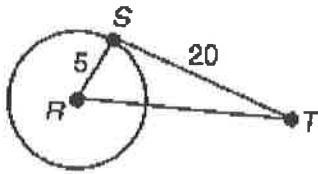
\_\_\_\_\_

15.  $\overline{AB}$  is tangent to  $\odot O$  at  $A$  (not drawn to scale). Find the length of the radius  $r$ , to the nearest tenth. (Simplified radical form.)



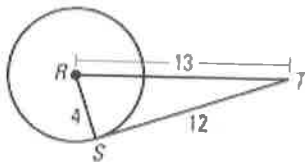
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16. Given  $\overline{ST}$  is tangent to  $\odot R$  at  $S$ , find  $RT$ . (Simplified radical form.)




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17. In the diagram,  $\overline{RS}$  is a radius of circle  $R$ . Is  $\overline{ST}$  tangent to circle  $R$ ? Explain.




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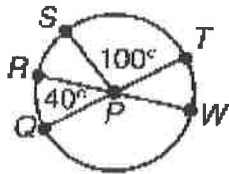
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18. Use the clock to estimate the minor arc measure formed by the hour and minute hands at 12:30.




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19. If  $\overline{QT}$  and  $\overline{RW}$  are diameters in  $\odot P$ , find  $m\widehat{QW}$ .




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