Name $\qquad$ Date $\qquad$ Pd $\qquad$ 10.1-10.5 Quiz Review CYU

## $\square$ Use when you get it right all by yourself

SUse when you did it all by yourself, but made a silly mistake
HUse when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
$X$ Use when a question was attempted but wrong (get help)
$N$ Use when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Vocabulary terms \& proper notation | $1-7$ |  | 30 |
| Tangent Line to a Circle Theorem | 8 |  |  |
| External Tangent Congruence Theorem | 9 |  | $18,19,23,24$, <br> 33,34 |
| Minor arcs, Major arcs, \& Semicircles | 10,15 | 16,17 | 31 |
| Central angles | 10,15 | 16,17 |  |
| Congruent Arcs | 11,12 |  | $35-57$ |
| Chord Rules (all three from 10.3) | 13 | 14 | $44-57$ |
| Inscribed Angles \& Polygons (10.4) | $20-22$ | $25-32$ | $35-43$ |
| Angle Relationships in Circles (10.5) |  |  |  |

Use the diagram to name, using proper notation, an answer for the following terms.

1. the circle
2. a radius
3. a diameter
4. a chord
5. a secant
6. a tangent
7. point of tangency


Find the value of $x$. Show all work for full credit.
8.

9.

10. Complete the rest of the circle. Fill in missing angles and arc measures. Then list two minor arcs and two major arcs, and a semicircle.


Explain in words whether the arcs are congruent or not. Justify your answer.
11. $\widehat{J M} \& \widehat{K L}$

12. $\widehat{P Q} \& \widehat{R S}$


13. Find $m \widehat{E G}$.

14. In the diagram, $\mathrm{AC}=\mathrm{FD}=30 \mathrm{ft}, \mathrm{PG}=(\mathrm{x}+5) \mathrm{ft}$, and $\mathrm{PJ}=(3 \mathrm{x}-1) \mathrm{ft}$. Find the radius of circle P .


A circular clock can be divided into 12 congruent sections.
15. Find the measure of each arc in this circle.
16. Find the measure of the minor arc formed by the hour and minute hands when the time is 7:00.

17. Find a time at which the hour and minute hands from an arc that is congruent to the arc in part (b).

In $\odot P, m A B=70^{\circ}, m A E=80^{\circ}, m E D=150^{\circ}, m \angle B F H=55^{\circ}$. Find the following measures.
18. $\mathrm{m} \overparen{\mathrm{BH}}=$ $\qquad$
19. $\mathrm{m} \overparen{\mathrm{HD}}=$ $\qquad$
20. $\mathrm{m} \angle \mathrm{AGE}=$ $\qquad$
21. $\mathrm{m} \angle \mathrm{DGE}=$ $\qquad$
22. $\mathrm{m} \angle \mathrm{ADK}=$ $\qquad$


In $\odot P, \overleftrightarrow{A S}$ and $\overleftrightarrow{A M}$ are tangents; $\overline{T R}$ is a diameter; $m T B=20^{\circ}, m M G=60^{\circ}, m G R=$ $65^{\circ}, m R S=125^{\circ}$. Find the following measures.
23. $m \overparen{B M}=$ $\qquad$
24. $\mathrm{m} \overparen{\mathrm{ST}}=$ $\qquad$
25. $\mathrm{m} \angle 1=$ $\qquad$
26. $m \angle 2=$ $\qquad$
27. $m \angle 3=$ $\qquad$
28. $m \angle A S P=$ $\qquad$
29. $m \angle 4=$ $\qquad$
30. $m \angle 5=$ $\qquad$
31. $m \angle 6=$ $\qquad$
32. $\mathrm{m} \angle 7=$ $\qquad$
In $\odot \bigcirc, \overleftrightarrow{E F}$ is tangent at $D, \overrightarrow{G A}$ bisects $\angle B G D, m \overparen{A B}=88^{\circ}$ and $m \overparen{D G}=62^{\circ}$. Find the following measures.
33. $\mathrm{m} \overparen{\mathrm{DA}}=$ $\qquad$
34. $\mathrm{m} \overparen{G B}=$ $\qquad$
35. $\mathrm{m} \angle 1=$ $\qquad$
36. $m \angle 2=$ $\qquad$
37. $m \angle 3=$ $\qquad$
38. $\mathrm{m} \angle 4=$ $\qquad$
39. $m \angle 5=$ $\qquad$
40. $m \angle 6=$ $\qquad$
41. $\mathrm{m} \angle 7=$ $\qquad$
42. $m \angle 8=$ $\qquad$
43. $m \angle 9=$ $\qquad$


Points $A, B, C, D$, and $E$ lie on ©O. DK is tangent at $D . m \overparen{B C}=80^{\circ}, m \overparen{m C D}=70^{\circ}, \pi E A$ $=30^{\circ}$. Find the measure of each numbered angle.
44. $\mathrm{m} \angle 1=$ $\qquad$
45. $m \angle 2=$ $\qquad$
46. $\mathrm{m} \angle 3=$ $\qquad$
47. $\mathrm{m} \angle 4=$ $\qquad$
48. $m \angle 5=$ $\qquad$
49. $\mathrm{m} \angle 6=$ $\qquad$
50. $\mathrm{m} \angle 7=$ $\qquad$
51. $\mathrm{m} \angle 8=$ $\qquad$
52. $\mathrm{m} \angle 9=$ $\qquad$
53. $m \angle 10=$ $\qquad$
54. $m \angle 11=$ $\qquad$
55. $m \angle 12=$ $\qquad$
56. $m \angle 13=$ $\qquad$
57. $m \angle 14=$ $\qquad$


CYU Reflection: How far can you go: basic, intermediate, or advanced? Rate your mastery leve!!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.


