# **NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PER.\_\_\_\_\_\_**

## **Chapter 10 Review**

**5 points added to your test, if complete.**

### CIRCLE BASICS

**Write a brief but thorough definition for each of the following geometric terms.**

|  |  |
| --- | --- |
| 1. chord |  |
| 1. tangent |  |
| 1. point of tangency |  |
| 1. secant |  |
| 1. radius |  |
| 1. diameter |  |

**Use below to name each of the following.**

**M**

**L**

**Q**

**N**

**P**

**O**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | The center. |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | All radii. |
| 9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | A diameter. |
| 10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | A secant. |
| 11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | A tangent. |
| 12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | A point of tangency. |
| 13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | A point in the interior. |
| 14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | A point in the exterior. |

TANGENTS

**Find the indicated values.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_ | **C**  **R**  **S**  **T**  Find the value of ‘’: |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_ | Find the value of ‘’: |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_ | Find the value of ‘’: |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_ | Find the perimeter of the quadrilateral: |

**CENTRAL ANGLES, ARCS, & SECTORS**

**Find the indicated values.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Given that is a diameter of , find the value of ‘’ and the .  A  B  C  D |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Find the value of ‘’. |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Find the length of .  R  S  T  U |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_ | Given that the , find the .  L  M  N  O |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | L  M  N O P  Find . |

**Find the indicated values.**

|  |  |
| --- | --- |
| 25. \_\_\_\_\_\_\_\_\_\_\_\_ | **E**  **X**  **A**  **M**  In , |
| 26. \_\_\_\_\_\_\_\_\_\_\_\_ | In ,  **S**  **T**  **U**  **D**  **Y** |
| 27. \_\_\_\_\_\_\_\_\_\_\_\_ | **A**  **C**  **E**  **D**  **T** |

**Using the figure below, find the measure of each of the following arcs.**

**A**

**B**

**C**

**D**

|  |  |
| --- | --- |
| 28. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 29. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 30. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 31. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

**In the figure below, is a diameter and is a tangent to . Find the measure of the following angles.**

|  |  |
| --- | --- |
| 32. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **A**  **O**  **B**  **C**  **D** |
| 33. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 34.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

**ARCS & CHORDS**

**Find the indicated measures.**

**C**

|  |  |
| --- | --- |
| 35. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 36. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | and  **O**  **P**  **M**  **N**  **L** |
| **C**  **E**  **A**  **B**  **D**  37. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **O**  **W**  **X**  **Y**  and |
| 38. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | and |
| 39. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **O**  **L**  **N**  **M**  **P** |

### INSCRIBED ANGLES

**Find the indicated measure for each of the following.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_ | Find the . |
| 41. \_\_\_\_\_\_\_\_\_\_ | Find the . |
| 42. \_\_\_\_\_\_\_\_\_\_ | Find the value of ‘’. |
| 43. \_\_\_\_\_\_\_\_\_\_ | Find the value of ‘’. |

ANGLES FORMED BY SECANTS AND TANGENTS

**Find the for each of the following.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |

ANGLES OF ALL TYPES

**is tangent to . is a diameter. , and . Find each of the following.**

**A**

**F**

**D**

**O**

**C**

**E**

**B**

**G**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_ |
| 1. \_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_ |
| 1. \_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_ |
| 1. \_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_ |

**Find the measure of each of the following if , , , and**

**.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_ | **O**  **I**  **S**  **T**  **G**  **H**  **1**  **2**  **3**  **4**  **5**  **6**   1. \_\_\_\_\_\_\_\_\_\_ |
| 1. \_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_ |
| 1. \_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_ |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |

SPECIAL SEGMENTS IN CIRCLES

**Find the indicated value for each of the following.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_ | ***.*** |
| 1. \_\_\_\_\_\_\_\_\_\_ | Find the radius: |

A Mishmash of Answers:

**N**

**A chord that goes through**

**the center of a circle**

**O**

**A line, ray, or segment that intersects**

**a circle at exactly one point**

**The point at which a tangent**

**intersects a circle**

**A segment with one endpoint**

**at the center and the other**

**on the circle**

**P**

**O**

**A segment with both endpoints**

**on the circle**

**A line that intersects a circle**

**at exactly 2 points**

**,,**