Chapter 8: Circles

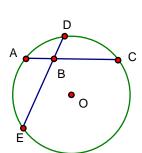
Lesson 8-6: Segment Formulas

Homework

Name______ Date _____ Period

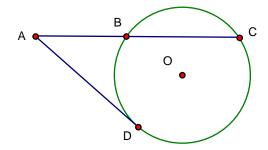
For questions 1 - 6, refer to the figure below and find the indicated value.

- 1. If AB = 25, BC = 3, and BE = 15, find BD.
- 2. If AB = 4, BC = 9, and BD = 6, find BE.
- 3. If AC = 16, AB = 4, and BE = 8, find DE.
- 4. If DE = 17, BD = 7, and AB = 5, find AC.
- 5. If AB = 3, $BC = 5 \frac{1}{3}$ and BE = 8, find BD.
- 6. If BE = 16, BD = 4, and B is the midpoint of AC, find AB.



In the accompanying diagram, * is tangent to circle O at D and * is a secant.

- 7. If AD = 9 and AB = 3, find AC.
- 8. If BC = 15 and AB = 1, find AD.
- 9. If AD = 8 and AB = 4, find AC.
- 10. If AB = 4 and BC = 5, find AD.
- 11. If AD = $3\sqrt{5}$ and AB = 3, find BC.



In the accompanying diagram, two secants are drawn from the same point.

- 12. If AB = 5, AC = 8, and AD = 2, find DE.
- 13. If AB = 3, BC = 7 and AE = 15, find AD.
- 14. If AB = 6, BC = 12, and AD = 4, find DE.
- 15. If AC = 20, AD = 8, and DE = 2, find AB.
- 16. If AB = 5, AD = 8 and DE = 2, find BC.
- 17. If B is the midpoint of \overline{AC} , and AD = 8, and DE = 17, find AC.

