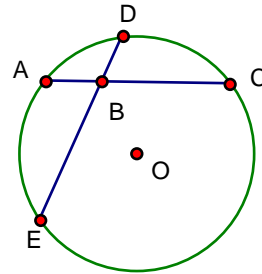


Chapter 8: Circles
Lesson 8-6: Segment Formulas
Homework

Name _____
 Date _____
 Period ____

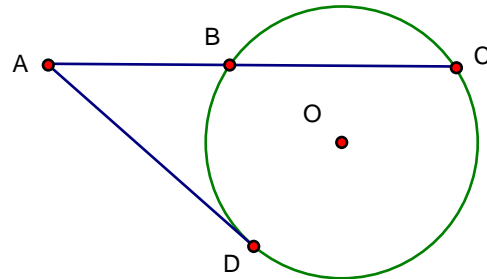
For questions 1 - 6, refer to the figure below and find the indicated value.

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, \overline{AD} is tangent to circle O at D and \overline{BC} 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 .

