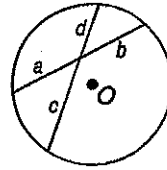


# Study Guide and Intervention

## Special Segments in a Circle

**Segments Intersecting Inside a Circle** If two chords intersect in a circle, then the products of the measures of the chords are equal.



$$a \cdot b = c \cdot d$$

**Example**

Find  $x$ .

The two chords intersect inside the circle, so the products  $AB \cdot BC$  and  $EB \cdot BD$  are equal.

$$AB \cdot BC = EB \cdot BD$$

$$6 \cdot x = 8 \cdot 3$$

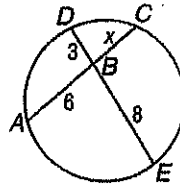
Substitution

$$6x = 24$$

Simplify.

$$x = 4$$

Divide each side by 6.

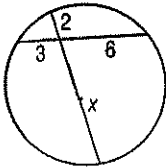


$$AB \cdot BC = EB \cdot BD$$

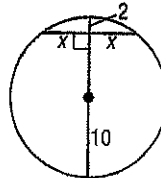
**Exercises**

Find  $x$  to the nearest tenth.

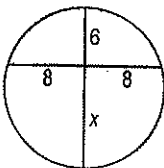
1.



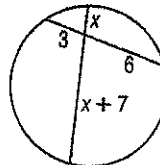
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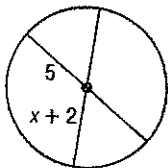
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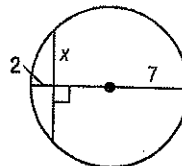
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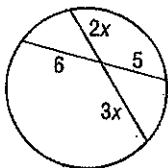
5.



6.



7.



8.

