

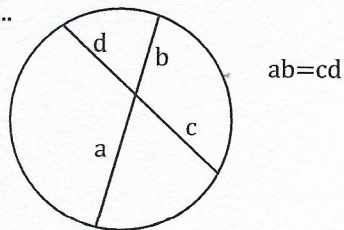
Name: _____

ch 10.7

Intersecting Chord Theorem

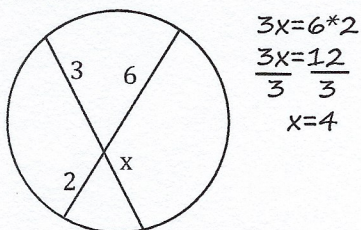
Have we crossed paths before?

This one is really easy, but really important. The Intersecting Chord Theorem says that if two chords intersect (that's cross each other) inside a circle, then the products of their segments are equal. Huh? A picture's worth a thousand words. So, instead of boring you with one-thousand words...

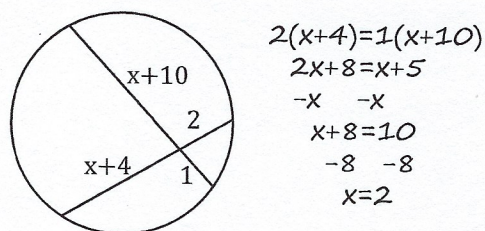


Here are a couple of examples.

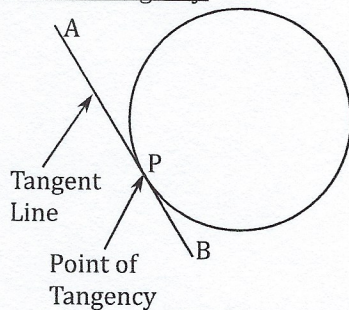
Ex. 1. Find x .



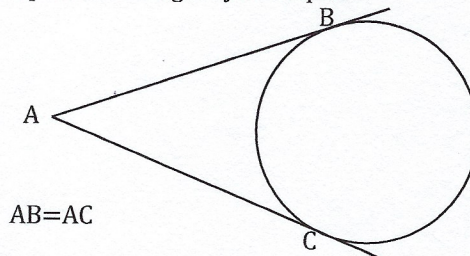
Ex. 2. Solve for x .



A Tangent is a line that intersects the exterior of the circle in exactly one spot. This spot is called the Point of Tangency.

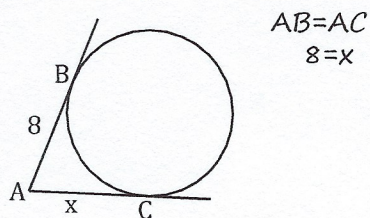


If two tangents intersect outside a circle then the distances from the intersecting point to the points of tangency are equal...

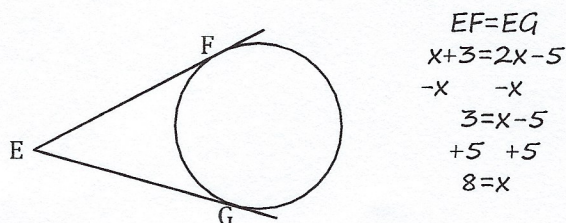


Let's look at examples of this...

Ex. 3. $AB=8$ Find AC .



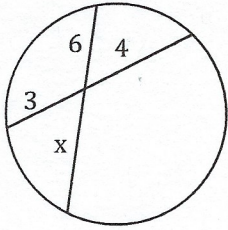
Ex. 4. $EF=x+3$, $EG=2x-5$. Solve for x .



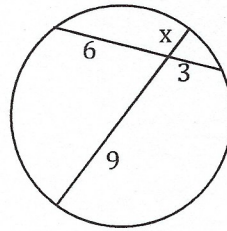
Let's practice...

Find x...

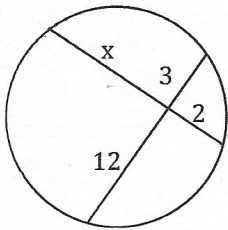
1.



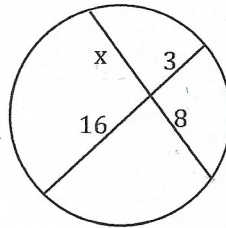
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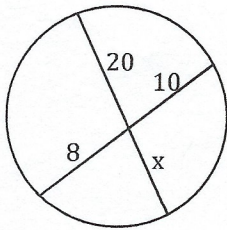
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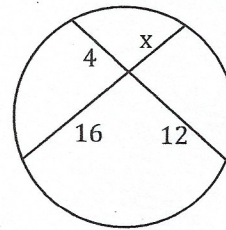
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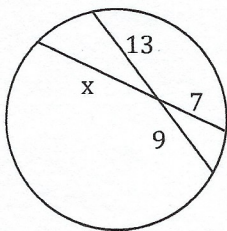
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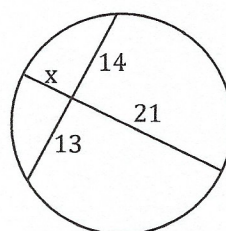
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7.



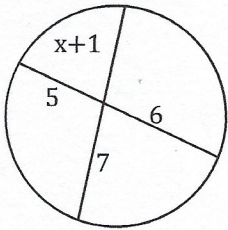
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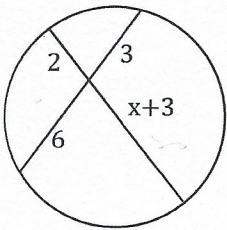
Bubble all the correct answers from above. Don't bubble incorrect answers.

8 4.85 4 19.5 1.5 8.67 4.5 16.71 19 6 3 2 2 18

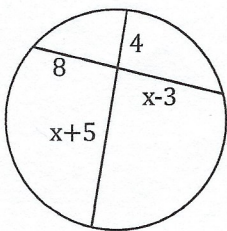
9.



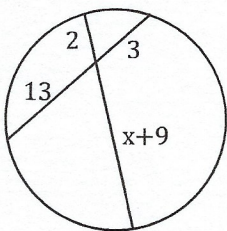
11.



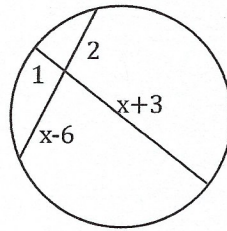
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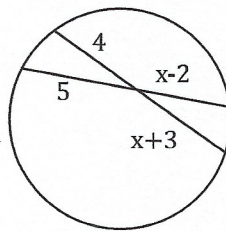
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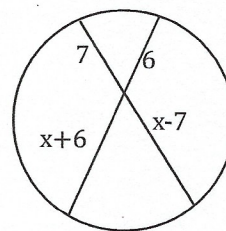
10.



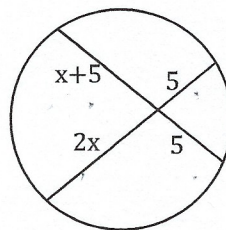
12.



14.



16.



Bubble all the correct answers from above. Don't bubble incorrect answers.

22 11 6 8 13.5 10.5 15 5 4.39 85 3.29 58 93 4.67