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Unit 10- Worksheet \#5: Angle Relationships in Circles
Find the indicated arc measure.

1. $m \widehat{A B}$
2. $m \overparen{F H}$

3. $m \sqrt{K L}$


Find $m \angle 1$
4.

5.


7.

8.

9.

10.

11.

12.


Find the value of $x$.
13.

14.

15.

16. In the diagram shown, $m$ is tangent to the circle at the point S . Find the measures of all numbered angles


Use the diagram shown to find the measure of the angle.

17. $m \angle C A F$
18. $m \angle A F B$
19. $m \angle C E F$
20. $m \angle C F B$
21. $m \angle D C F$
22. $m \angle B C D$
23. In the diagram at the right, television cameras are positioned at $A, B$ and $C$ to record that happens on stage. The stage is an arc of $\odot A$.
a.) Find the $m \angle A, m \angle B$ and $m \angle C$.
b.) The wall is tangent to the circle. Find $x$ without using the measure of $\angle C$.

c.) You would like Camera B to have a $30^{\circ}$ view of the stage. Should you move the camera closer or further away from the stage? Explain.

