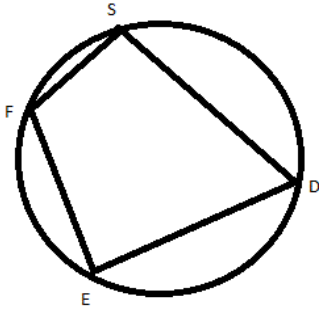


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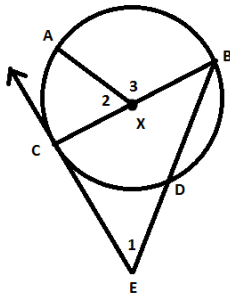
Geometry
 Unit 10
 HW 10-3

1)



If $m\angle SFE = 8x - 34$, $m\angle DSF = 4x - 6$, and $m\angle SDE = 3x + 5$, find $m\widehat{FSD}$

2)

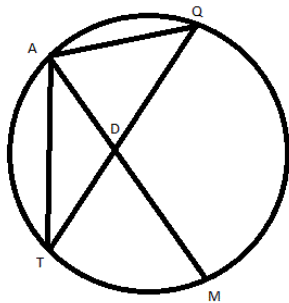


In $\odot X$, $CX = 10$ in and $m\angle AXB = 105^\circ$. Find the length of \widehat{AC} to the nearest inch.

3) Using the diagram for #2, In $\odot X$, $BX = 15$ mm, $\widehat{BD} : \widehat{CD} = 3 : 2$. Find the length of arc CD to the nearest tenth of a mm.

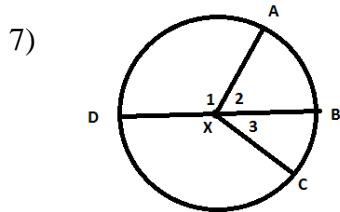
4) Using the diagram for #2, in $\odot X$, $BC = 52$ feet. Find the area of sector AXC if $m\widehat{AC} = 3x + 7$ and $m\widehat{BA} = 10x - 22$.

5)



If $\widehat{TA} : \widehat{QA} : \widehat{QM} : \widehat{TM} = 4 : 3 : 10 : 5$, find $m\angle TAQ$

6) Using the diagram for #5, if $m\angle DAQ = 6x + 5$, $m\angle AQD = 2x + 22$, and $m\angle QDA = 6x - 1$, find the measure of arc QM.



In $\odot X$, $BD = 42\text{ft}$ and $m\angle 1 = \frac{3}{4}\pi$ radians. Find the length of arc AD to the nearest tenth of a foot.

8) Using the diagram for #7, in $\odot X$ $m\angle 1 = 14x - 2$, $m\angle 2 = 10x - 10$, and $m\angle 3 = 6x + 12$, find the length of arc DC to the nearest tenth of a meter if $DB = 86\text{m}$.

9) Using the diagram for #7, in $\odot X$, the area of sector $AXC = 62$ square inches, $m\angle AXC = 10x + 16$, $m\angle 2 = 7x + 1$, and $m\angle BXC = 6x - 6$. Find the area of the entire circle.