Geometry R - Mr. Bo
Name: $\qquad$ Unit 10 - Day 3 HW

Date: $\qquad$

1. Circle P with Tangent $\overline{R S}$.

a. If $R S=10$ and $R P=5$, find $P S$.
b. If $\mathrm{PT}=6$ and $\mathrm{TS}=8$, find RS.
2. Circle $P$ with Tangent $\overline{B C}$.
a. $m \widehat{A D B}=240^{\circ}$
b. $m \angle A B C=75^{\circ}$
c. $m \overparen{A D B}: m \overparen{A B}=3: 2$

Find $m \angle A B C$.
Find $m \overparen{A B}$
Find $m \angle A B C$.

3. Circle P. Solve for $x$. (Assume lines that look tangent are tangent)
a.

b.

c.

d.

e.

f.

4. Circle $P$. Find the value of $x$. (Assume lines that look tangent are tangent)
a. $x=m \angle A B C$

b.

c. $x=\widehat{A B C}$

5.
a. Convert $\frac{11 \pi}{12}$ radians into degrees.
b. Convert $150^{\circ}$ into radians (in terms of $\pi$ )

## 6. Complete the Proofs:

a. Given: $\odot E$ and $\odot B$ are tangent to $A D C$ at points D and C respectively.

b. Given: Circle O

Tangents $\overline{P D} \& \overline{P C}$

Prove: $\angle C P O \cong \angle D P O$


