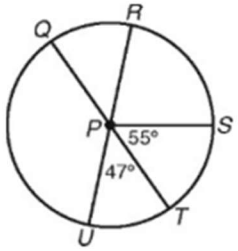
LESSON 15-1

Central Angles and Inscribed Angles

Practice and Problem Solving: A/B

For each figure, determine the indicated measures.

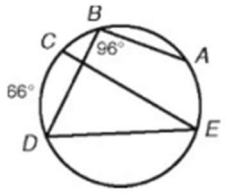
4.



$m\overset{\frown}{QS}$ = _____

$m\overset{\frown}{RQT}$ = _____

5.

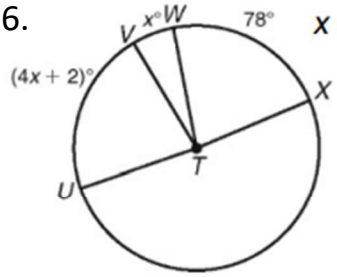


$m\angle CED$ = _____

$m\overset{\frown}{DEA}$ = _____

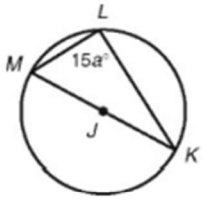
Find the unknown value.

6.



x = _____

7.



a = _____

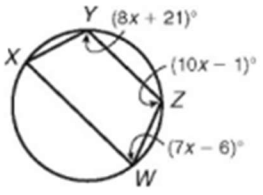
LESSON 15-2

Angles in Inscribed Quadrilaterals

Practice and Problem Solving: A/B

For each inscribed quadrilateral, determine the angle measures.

2.



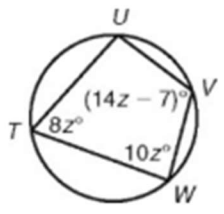
$m\angle X$= _____

$m\angle Y$ = _____

$m\angle Z$ = _____

$m\angle W$ = _____

3.



$m\angle T$ = _____

$m\angle U$ = _____

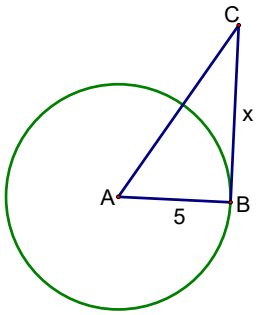
$m\angle V$ = _____

$m\angle W$ = _____

LESSON 15-3

Tangents and Circumscribed Angles

Practice and Problem Solving: A/B



In $\odot A$, $AC = 13$.

1) Find $m\angle B$.

2) Find x.

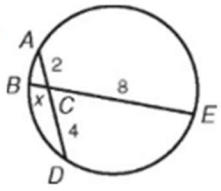
LESSON 15-4

Segment Relationships in Circles

Practice and Problem Solving: A/B

For each figure, determine the value of the variable and the indicated lengths by applying the Chord-Chord Product Theorem.

1.

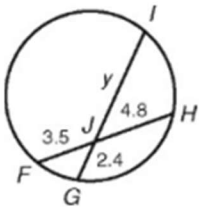


$x =$ _____

$AD =$ _____

$BE =$ _____

2.



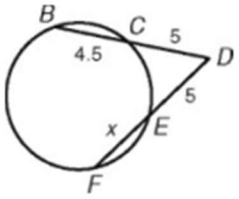
$y =$ _____

$FH =$ _____

$GI =$ _____

For each figure, determine the value of the variable and the indicated lengths by applying the Secant-Secant Product Theorem.

3.

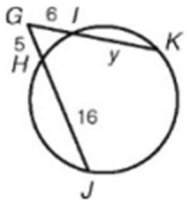


$x =$ _____

$BD =$ _____

$FD =$ _____

4.



$y =$ _____

$GJ =$ _____

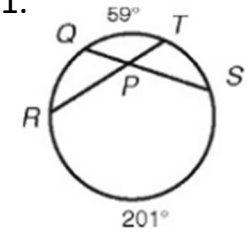
$GK =$ _____

LESSON 15-5

Angle Relationships in Circles

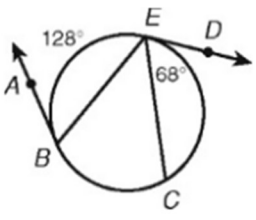
Practice and Problem Solving: A/B

1.



$m\angle RPS =$ _____

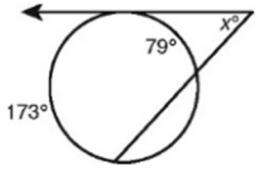
2.



$m\angle ABE =$ _____

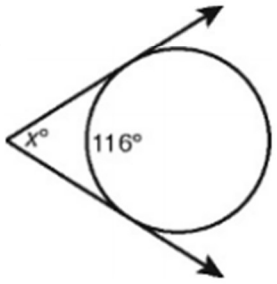
$m\overset{\frown}{CE} =$ _____

3.



$x =$ _____

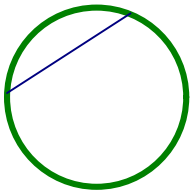
4.



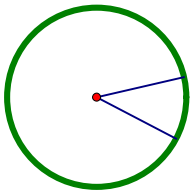
$x =$ _____

Match each term with the appropriate picture.

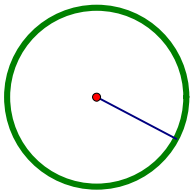
Center



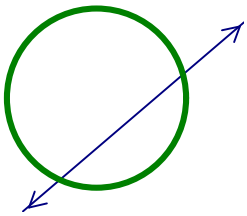
Radius



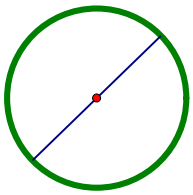
Diameter



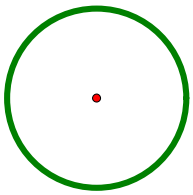
Chord



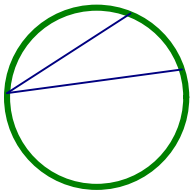
Central Angle



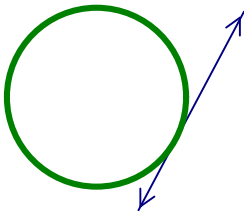
Inscribed Angle



Tangent Line



Secant Line



Factor:

1. $x^2 + x - 90$
2. $x^2 + 8x + 7$
3. $x^2 - 10x + 9$
4. $x^2 + 2x - 24$
5. $x^2 - 13x + 40$
6. $x^2 - x - 56$

Solve for x. Hint: Factor first!

1. $x^2 - 3x - 70 = 0$
2. $x^2 + 8x + 15 = 0$
3. $x^2 - 9x + 8 = 0$
4. $x^2 + 2x - 48 = 0$
5. $x^2 - 9x + 18 = 0$
6. $x^2 - 12x = -35$