Angles in Inscribed Quadrilaterals

Practice and Problem Solving: A/B

Each quadrilateral described is inscribed in a circle. Determine the angle measures.

1. Quadrilateral ABCD has $m\angle A = 53^{\circ}$ and $m\angle B = 82^{\circ}$.

m∠*C* =

m∠*D* =

2. Quadrilateral RSTU has $m \angle S = 104^{\circ}$ and $m \angle T = 55^{\circ}$.

 $m\angle R =$

m∠*U* =

3. Quadrilateral *JKLM* has $m \angle J = 90^{\circ}$ and $\angle K \cong \angle M$.

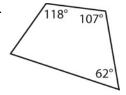
m∠*K* =

 $m\angle L =$

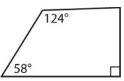
m∠*M* =

Determine whether each quadrilateral can be inscribed in a circle. If it cannot be determined, say so.

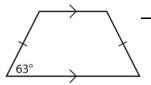
4.

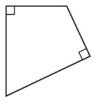


5.

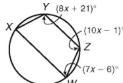


6.

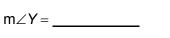




For each inscribed quadrilateral, determine the angle measures.



m∠*Z* =



 $m \angle W =$



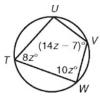
 $m\angle C =$

 $m\angle D =$

m∠*E* =

m∠*F* =

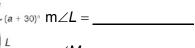
10.



 $m \angle T =$

11.

(a + 16)°,



m∠*K* = _____

 $m \angle N =$