2. 
Given:  
\( \odot P \)  
PQ = RP  
AB = 6x + 14  
CD = 4 - 4x  

Find:  
AB

5. 
Given:  
\( \odot P \)  
P is the midpoint of MN  
MN \perp AD; MN \perp BC

Prove:  
ABCD is a parallelogram

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6. A fly is sitting at the midpoint of a wooden chord of a circular wheel. The wheel has a radius of 10 cm, and the chord has a length of 12 cm.

   a. How far from the hub (center) is the fly?

   b. The wheel is spun. What is the path of the fly?

9. Given: \( \odot F \), \( FE \perp BC \), \( FD \perp AB \), \( BF \) bisects \( \angle ABC \)

   Prove: \( BC = BA \)

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<td>( FE \perp BC )</td>
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<td>( FD \perp AB )</td>
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<td>( BF ) bisects ( \angle ABC )</td>
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<td>( BC = BA )</td>
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10. Given: \( \Theta F \)
\( FE \perp AC, DF \perp AB \)
\( AC = AB \)

Prove: \( \triangle ADE \) is isosceles

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11.

a. Find \( AB \)

b. Find the radius of \( \Theta O \)
12. A regular hexagon with perimeter of 24 is inscribed in a circle. How far from the center is each side?

13. A 16-by-12 rectangle is inscribed in a circle. Find the radius of the circle.
15.

Given: \( \triangle ABC \) is isosceles with \( \overline{AB} = \overline{AC} \)
\( \overline{AD} \perp \overline{BC}, \overline{EF} \perp \overline{AC} \)

Find:  
\( \text{a. The radius of the circle} \)

\( \text{b. The perimeter of } \triangle ABC \)