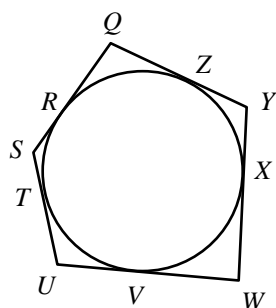


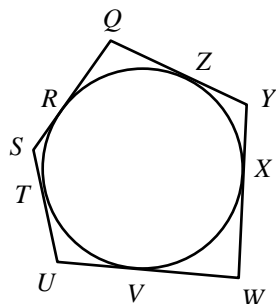
G.G.50: Investigate, justify, and apply theorems about tangent lines to a circle: a perpendicular to the tangent at the point of tangency; two tangents to a circle from the same external point; common tangent of two non-intersecting or tangent circles

1. The circle is circumscribed by the pentagon as shown (not drawn to scale). If $QZ = 10$, $YX = 9$, $XW = 9$, $UW = 17$, and $SU = 10$, find the perimeter of the pentagon.



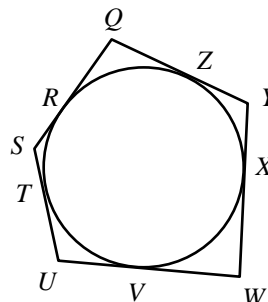
- [A] 76 [B] 102 [C] 110 [D] 84

2. The circle is circumscribed by the pentagon as shown (not drawn to scale). If $QZ = 12$, $YX = 8$, $XW = 9$, $UW = 18$, and $SU = 15$, find the perimeter of the pentagon.



- [A] 88 [B] 129 [C] 124 [D] 93

3. The circle is circumscribed by the pentagon as shown (not drawn to scale). If $QZ = 9$, $YX = 7$, $XW = 12$, $UW = 15$, and $SU = 16$, find the perimeter of the pentagon.



- [A] 118 [B] 88 [C] 124 [D] 82

4. Suppose you stand at a distance from a circular building. Assuming your lines of sight form tangents to the building and make an angle of 22° , what is the measure of the arc of the building that your lines of sight intersect?
5. A park maintenance person stands 19 m from a circular monument. If you assume her lines of sight form tangents to the monument and make an angle of 43° , what is the measure of the arc of the monument that her lines of sight intersect?
6. What arc of Earth is visible to a spaceship if the angle formed between two tangents to Earth is 30° ?

- [A] 137 [B] 133 [C] 94 [D] 47

Geometry Practice: Tangents #3

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[1] A

[2] A

[3] B

[4] 158

[5] A

[6] 150°