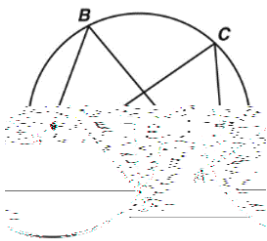


1. Points A, B, C, and D are consecutive points on Circle W as shown.
Which angle must be congruent to _____?

- A. _____
- B. _____
- C. _____
- D. _____

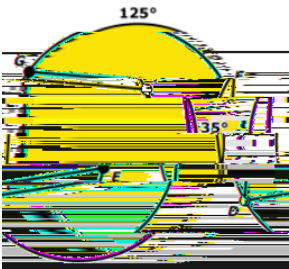


2. In the state of Washington, a county is considered rural if it has a population density less than 100 persons per square mile. Based on the information in the table, which county can be considered rural?

- King
- Benton
- Spokane
- Whatcom

2010 Area and Populations of Washington Counties			
County	Area (sq. mi.)	Population	Population Density (per sq. mi.)
Adams	1,075	14,000	13
Benton	2,075	14,000	7
Chelan	4,000	14,000	4
Clallam	2,400	14,000	6
Columbia	1,000	14,000	14
Cowlitz	1,000	14,000	14
Douglas	1,000	14,000	14
Ferry	1,000	14,000	14
Gigamon	1,000	14,000	14
Grant	1,000	14,000	14
Grays	1,000	14,000	14
Island	1,000	14,000	14
Jackson	1,000	14,000	14
Kittitas	1,000	14,000	14
Klickitat	1,000	14,000	14
Lincoln	1,000	14,000	14
Lewis	1,000	14,000	14
Mason	1,000	14,000	14
Mitchell	1,000	14,000	14
Mullikin	1,000	14,000	14
Naselle	1,000	14,000	14
Okanogan	1,000	14,000	14
Pacific	1,000	14,000	14
Pierce	1,000	14,000	14
San Juan	1,000	14,000	14
Snohomish	1,000	14,000	14
Spokane	1,000	14,000	14
Stevens	1,000	14,000	14
Suquamish	1,000	14,000	14
Tacoma	1,000	14,000	14
Thurston	1,000	14,000	14
Walla Walla	1,000	14,000	14
Washitan	1,000	14,000	14
Whatcom	1,000	14,000	14
Yakima	1,000	14,000	14

3. Quadrilateral *DEFG* is inscribed in a circle as shown.
The measures of two minor arcs of the circle are shown. Complete the table with the correct measures to prove that angles *EFG* and *GDE* are supplementary.

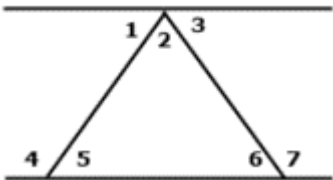


Quantity		Measure	
arc DE	125°	arc FG	35°
arc EF	_____	arc DG	_____
arc FD	_____	arc GE	_____
m∠EFG	_____	m∠GDE	_____

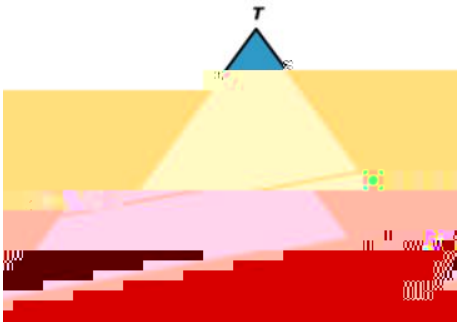
4. Sheri wants to prove that the sum of the interior angles in a triangle is 180°. To do this, she sketched out a pair of parallel line segments and formed a triangle in between those lines. She then wrote the first few statements to try to prove this. Select *ALL* of the statements that must be true in the proof.

- Statement 1
- Statement 2
- Statement 3
- Statement 4

Statement	Statement
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____



5. In the figure below, *RTV* is shown with _____. Marisa thinks that the measure of _____ is because $8 - 3 = 5$ and $6 - 5 = 1$. Roberto thinks that the measure of _____ is some other number. Find the correct measure of _____.



6. A square pyramid is sliced by a plane that passes through the pyramid's top vertex and is perpendicular to the pyramid's base. What is the resulting cross section?

A. a triangle

B. a trapezoid

C. a pentagon

D. a square

7. A rectangle is shown below. The rectangle is rotated 360° about the line . What three-dimensional shape is made by this rotation?

12. A diameter of a circle has endpoints of $(-5, 6)$ and $(-5, -2)$. What is the equation of this circle?

- A. $(x + 5)^2 + (y - 2)^2 = 16$
- B. $(x - 5)^2 + (y + 2)^2 = 4$
- C. $(x + 5)^2 + (y - 2)^2 = 4$
- D. $(x + 5)^2 + (y - 2)^2 = 64$

13. Consider MNO , shown in the diagram. Determine whether each statement describes MNO . Select Correct or Incorrect for each statement.

14. A rectangle is drawn around a regular hexagon so that it forms four congruent right triangles in the corners of the rectangle. How much larger is the area of the rectangle than the area of the hexagon?

- A. 86.6 square cm
- B. 100.0 square cm
- C. 111.8 square cm
- D. 173.2 square cm

15. The figure below shows quadrilateral $PQRS$ inscribed in a circle. Which procedure can be used to determine the measure of angle P ?

- A. Add the expressions together and set them equal to 360, solve for x , and then substitute the value for x back into $3x - 10$.
- B. Add the expressions together and set them equal to 180, solve for x , and then substitute the value for x back into $3x - 10$.
- C. Subtract the expressions and set them equal to 180, solve for x , and then substitute the value for x back into $3x - 10$.
- D. Set the expressions equal to one another, solve for x , and then substitute the value for x back into $3x - 10$.