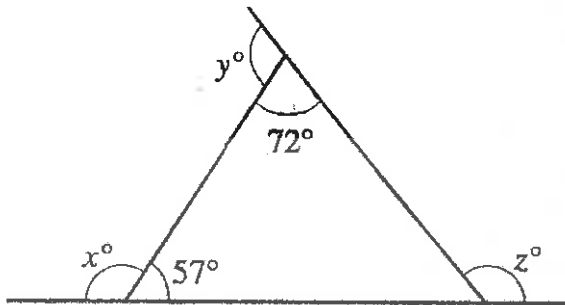


Name _____

Date _____ Per _____

Angles Study Guide

1. Given the triangle shown below with exterior angles that measure x° , y° and z° as shown, what is the sum of x , y , and z ?

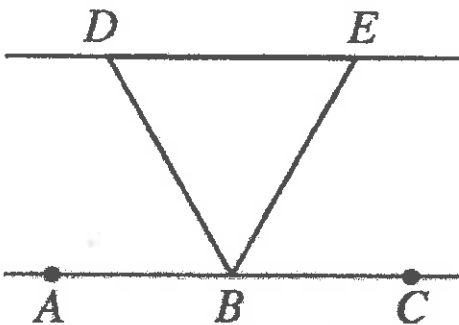


Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

360°

2. In the figure below, B lies on AC, BD bisects $\angle ABE$ and BE bisects $\angle CBD$. What is the measure of $\angle DBE$?



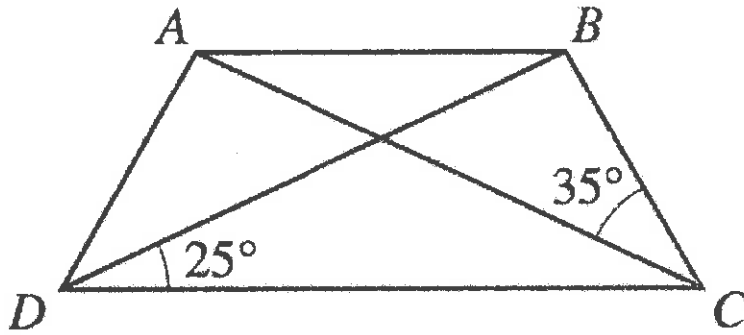
60°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

Angles Study Guide

3. In isosceles trapezoid ABCD, AB is parallel to DC, $\angle BDC$ measures 25° , and $\angle BCA$ measures 35° . What is the measure of $\angle DBC$?

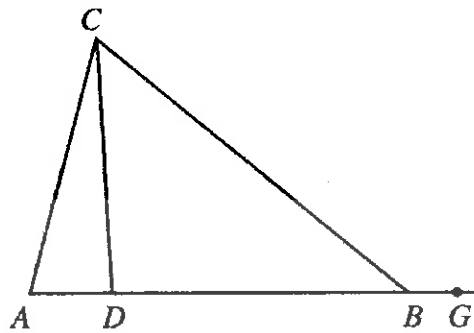


95°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

4. In the figure below A, D, B, and G are collinear. If $\angle CAD$ measures 76° , $\angle BCD$ measures 47° and $\angle CBG$ measures 140° . What is the degree measure of $\angle ACD$?



17°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

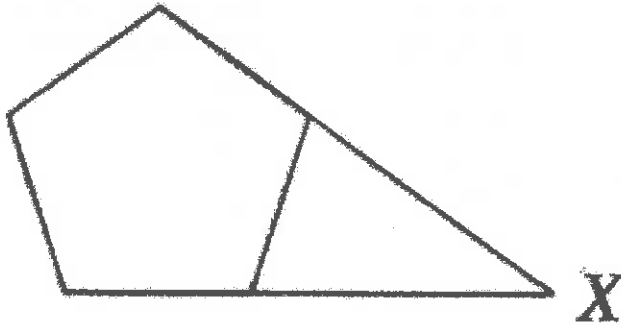
Skills Needed:

Name _____

Date _____ Per _____

Angles Study Guide

5. In the figure below, 2 nonadjacent sides of a regular pentagon (5 congruent sides and 5 congruent interior angles) are extended until they meet at point X. What is the measure of X?

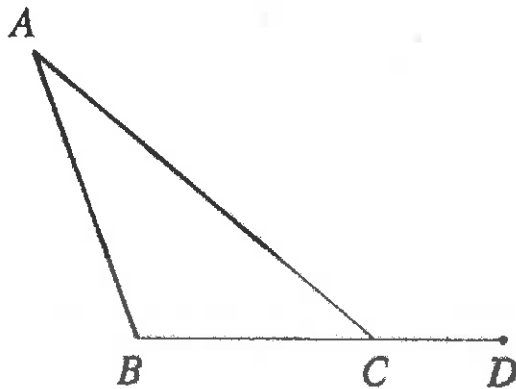


36°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

6. In the figure below, $\angle BAC$ measures 30° , $\angle ABC$ measures 110° , and points B, C, and D are collinear. What is the measure of $\angle ACD$?



140°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

Name _____
Date _____ Per _____

Angles Study Guide

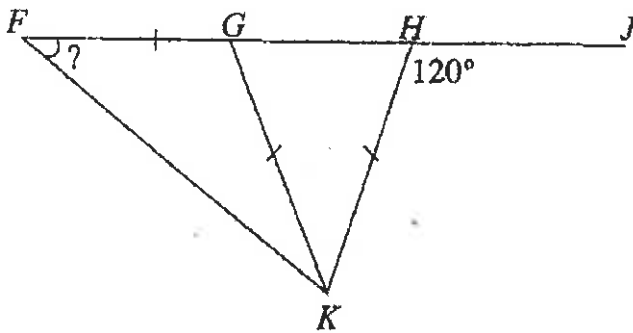
7. In $\triangle ABC$, the sum of the measures of $\angle A$ and $\angle B$ is 47° . What is the measure of $\angle C$?

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

133°

8. In the figure below, F , G , H , and J are collinear. FG , GK , and HK are line segments of equivalent length, and the measure of $\angle JHK$ is 120° . What is the degree measure of $\angle GFK$?



30°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

Name _____

Date _____ Per _____

Angles Study Guide

9. In $\triangle XYZ$, Y is a right angle and z measures less than 52° . Which of the following phrases best describes the measure of X?

- a. Greater than 38°
- b. Equal to 38°
- c. Equal to 45°
- d. Equal to 142°
- e. Less than 38°

A

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

10. Points E, F, and G are collinear. Point H is a point not on EG. If the measure of $\angle GFH$ is 64° , then what is the measure of $\angle EFH$?

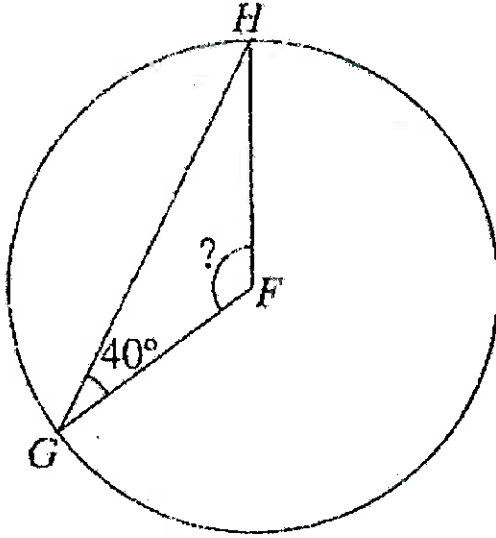
Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

116°

Angles Study Guide

11. Points G and H lie on circle F as shown below. If the measure of $\angle FGH$ is 40° , then what is the measure of central angle $\angle GFH$?



100°

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

12. In $\triangle JKL$ the measure of J is exactly 37° and the measure of K is less than or equal to 63° . Which of the following phrases best describes the measure of L?

- a. Exactly 120°
- b. Exactly 100°
- c. Exactly 80°
- d. Greater than or equal to 80°
- e. Less than or equal to 80°

D

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

Name _____

Date _____ Per _____

Angles Study Guide

13. Right triangle $\triangle WXY$ is isosceles and has its right angle at Point X. Point Z is collinear with points X and Y, with Y between X and Z. What is the measure of $\angle WYZ$?

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	ratio
		Ratio	

Skills Needed:

| 35°

Skills Bank:

- know sum of supplementary angles
- know sum of angles of triangle
- know the meaning of isosceles
- know the sum of external angles of a regular polygon
- know the definition of bisect

