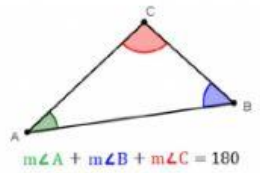
BALTIMORE LEADERSHIP SCHOOL
for young women

8TH GRADE MATH TEST

NAME: _____ **COURSE:** 8TH GRADE MATH

TEACHER: _____ **DATE:** _____

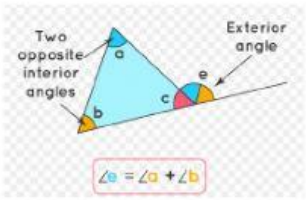


Test I: Multiple Choice (1 point each)

Instruction: Encircle the letter of your answer.

1.Which of the following states the triangle sum theorem?

a. The sum of interior angles of a triangle is 180 degrees.
b. The sum of exterior angles equals the sum of remote interior angles.
c. The sum of two angles equals 180 degrees.
d. The sum of two angles equals 90 degrees.

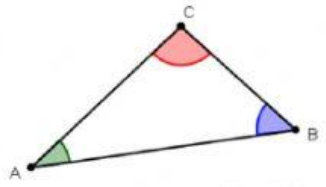


2. Which of the following states the exterior angle theorem?

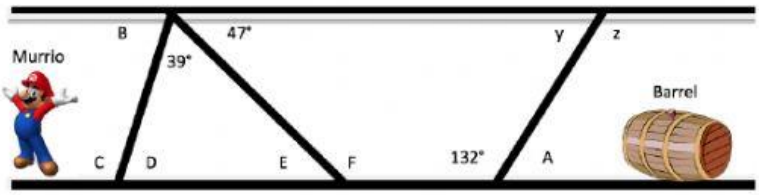
a. The sum of interior angles of a triangle is 180 degrees.
b. The sum of exterior angles equals the sum of remote interior angles.
c. The sum of two angles equals 180 degrees.
d. The sum of two angles equals 90 degrees.

3. Which of the following states the supplementary angles?

a. The sum of interior angles of a triangle is 180 degrees.
b. The sum of exterior angles equals the sum of remote interior angles.
c. The sum of two angles equals 180 degrees.
d. The sum of two angles equals 90 degrees.



For question 4, refer to the figure below.



4. What is the measure of angle B as shown in the figure above?

a. 39° B. 94° C. 132° D. 47°

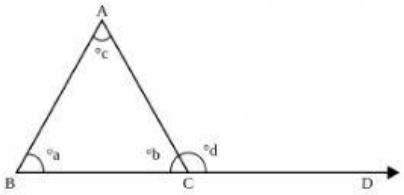
For question 5, refer to the image below.

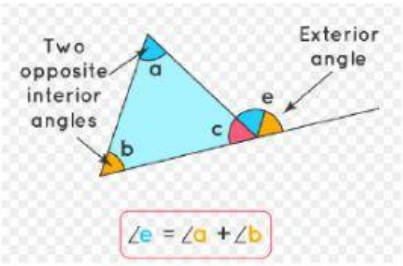
5. What is the angle measurement of ∠BDC?

a) 50°
b) 55°
c) 60°
d) I cannot find it with the information provided.

Test II: Short Answer (2 points each)

For questions 1 to 2, refer to the figure below:

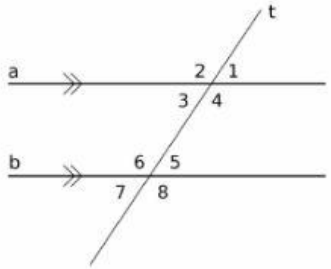




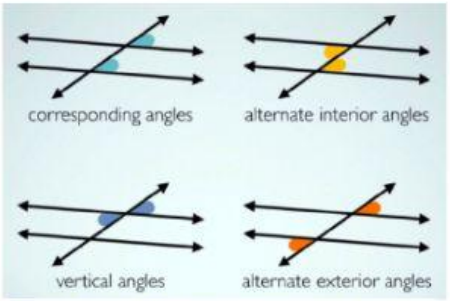
1. If angle a is 62°, and angle d is 125°, what is the measure of angle c? _____°

2. If the two remote interior angles measure 60 degrees each, what is the measure of an exterior angle d? _____°

For questions 3 to 5, refer to the figure below.



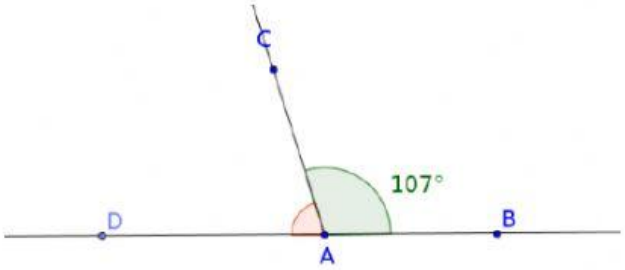
3. How is ∠2 related to ∠3? _____



4. What is the relationship between ∠5 and ∠7? _____°

5. If m ∠2 = 110 degrees, find the measure of ∠1. _____°

For question 6, refer to the figure below.

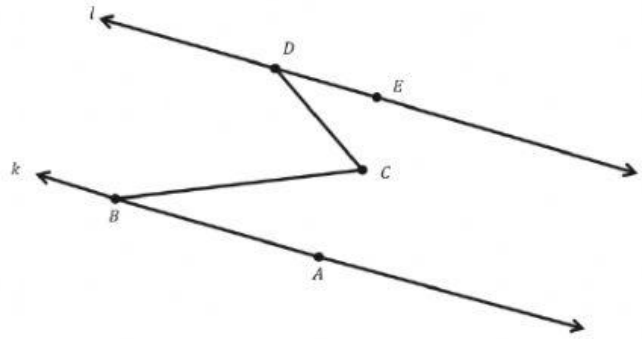


6. Find the measure of DAC. _____°

Test III: Explanation (10 points each)

1. Use the diagram to answer the question below. (10 points)

$k \parallel l$



Line k is parallel to line l. $m\angle EDC = 41°$ and $m\angle ABC = 32°$. Find the $m\angle BCD$. Explain in detail how you know you are correct. Add additional lines and points as needed for your explanation.

_____
_____
_____
_____
_____
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_____.