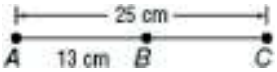
Colegio Beato Carlos Manuel Rodríguez
Departamento de Matemáticas
Geometría

Name: _____ **10** ____ **ID: A**

Geometría

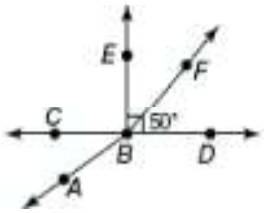
Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Find the length of $\overline{BC}$.



   a. 12 cm
   b. 13 cm
   c. 25 cm
   d. 38 cm

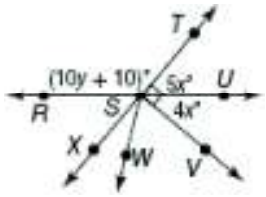
Use the figure below to answer the following questions.



2. Which point is the vertex of all the angles in this figure?
   a. *A*
   b. *C*
   c. *B*
   d. *E*

3. What type of angle is $\angle ABC$?
   a. acute angle
   b. right angle
   c. obtuse angle
   d. straight angle

Use the figure below to answer the following questions.



4. Which pair of angles are vertical angles?
   a. $\angle RST$, $\angle TSU$
   b. $\angle TSU$, $\angle USV$
   c. $\angle RSX$, $\angle TSU$
   d. $\angle RSX$, $\angle XSW$

5. Which angle is supplementary to $\angle USV$?
   a. $\angle TSU$
   b. $\angle VSW$
   c. $\angle RSV$
   d. $\angle WSR$

6. Find the values of x and y.
   a. $x = 10, y = 12$
   b. $x = 20, y = 7$
   c. $x = 10, y = 8$
   d. $x = 50, y = 40$

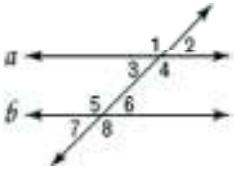
Find the measurement of the segment.

7. $PR = 18.8$ mm, $RS = 13.7$ mm

$PS = ?$

a. 32.7 mm
b. 5.1 mm
c. 32.5 mm
d. 32.4 mm

Refer to the figure below to answer the following questions. Identify the special name for each angle pair.



8. $\angle 1$ and $\angle 8$

a. alternate exterior
b. alternate interior
c. consecutive interior
d. corresponding

9. $\angle 3$ and $\angle 7$

a. alternate exterior
b. alternate interior
c. consecutive interior
d. corresponding

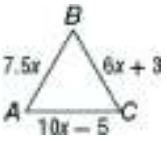
10. Given a $\parallel$ b, and $m\angle 2 = 65$, find $m\angle 6$.

a. 25
b. 65
c. 115
d. 140

11. Given a $\parallel$ b, $m\angle 3 = 5x + 10$, and $m\angle 5 = 3x + 10$, find the value of x.

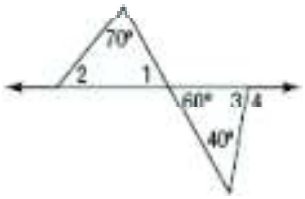
a. 110
b. 70
c. 20
d. 2.5

12. What is the value of x if $\triangle ABC$ is equilateral?



a. –8
b. $-\frac{1}{8}$
c. $\frac{1}{2}$
d. 2

Use the figure below to answer the following questions.



13. What is $m\angle 2$?

a. 50
b. 70
c. 110
d. 120

14. What is $m\angle 4$?

    a. 10

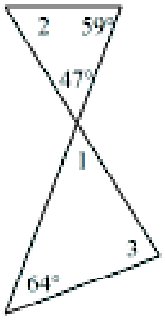
    b. 60

    c. 100

    d. 120

Find each measure.

15. $m\angle 1$, $m\angle 2$, $m\angle 3$



    a. $m\angle 1 = 64$, $m\angle 2 = 74$, $m\angle 3 = 52$
    b. $m\angle 1 = 64$, $m\angle 2 = 47$, $m\angle 3 = 52$
    c. $m\angle 1 = 47$, $m\angle 2 = 74$, $m\angle 3 = 69$
    d. $m\angle 1 = 47$, $m\angle 2 = 59$, $m\angle 3 = 64$

16. Triangle FJH is an equilateral triangle. Find x and y.

    a. $x = \frac{7}{5}$, $y = 16$
    b. $x = 7$, $y = 16$
    c. $x = \frac{7}{5}$, $y = 14$
    d. $x = 7$, $y = 14$