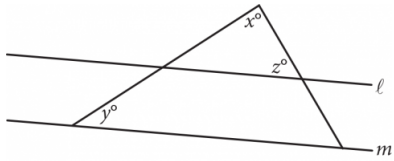


In the given triangle, $AB = AC$ and $\angle ABC$ has a measure of 67° . What is the value of x ?

- A. 36
- B. 46
- C. 58
- D. 70



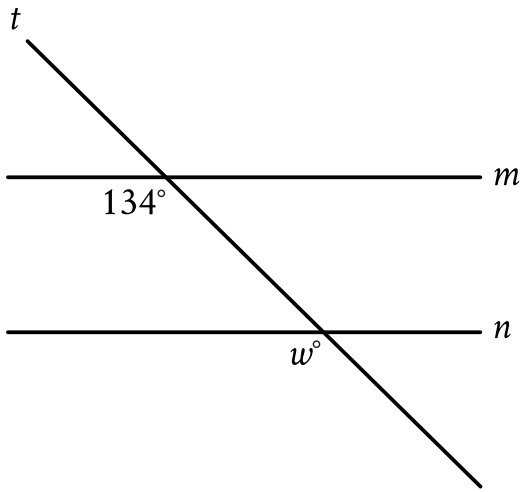
Note: Figure not drawn to scale.

In the figure above, lines ℓ and m are parallel, $y = 20$, and $z = 60$. What is the value of x ?

- A. 120
- B. 100
- C. 90
- D. 80

In $\triangle XYZ$, the measure of $\angle X$ is 24° and the measure of $\angle Y$ is 98° . What is the measure of $\angle Z$?

- A. 58°
- B. 74°
- C. 122°
- D. 212°



Note: Figure not drawn to scale.

In the figure, line m is parallel to line n . What is the value of w ?

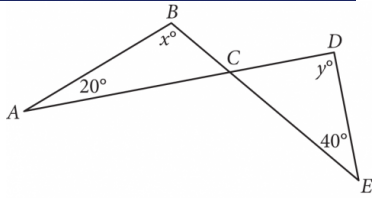
- A. 13
- B. 34
- C. 66
- D. 134

In $\triangle XYZ$, the measure of $\angle X$ is 23° and the measure of $\angle Y$ is 66° . What is the measure of $\angle Z$?

- A. 43°
- B. 89°
- C. 91°
- D. 179°

At a certain time and day, the Washington Monument in Washington, DC, casts a shadow that is 300 feet long. At the same time, a nearby cherry tree casts a shadow that is 16 feet long. Given that the Washington Monument is approximately 555 feet tall, which of the following is closest to the height, in feet, of the cherry tree?

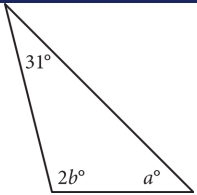
- A. 10
- B. 20
- C. 30
- D. 35



Note: Figure not drawn to scale.

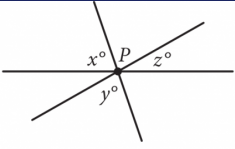
In the figure above, \overline{AD} intersects \overline{BE} at C . If $x = 100$, what is the value of y ?

- A. 100
- B. 90
- C. 80
- D. 60



In the triangle above, $a = 45$. What is the value of b ?

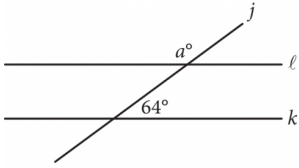
- A. 52
- B. 59
- C. 76
- D. 104



Note: Figure not drawn to scale.

In the figure, three lines intersect at point P . If $x = 65$ and $y = 75$, what is the value of z ?

- A. 140
- B. 80
- C. 40
- D. 20

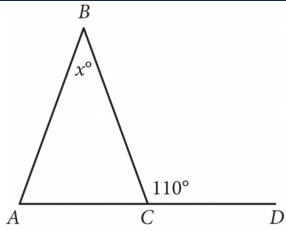


Note: Figure not drawn to scale.

In the figure above, lines ℓ and k are parallel.

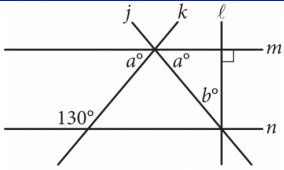
What is the value of a ?

- A. 26
- B. 64
- C. 116
- D. 154



In the given figure, \overline{AC} extends to point D . If the measure of $\angle BAC$ is equal to the measure of $\angle BCA$, what is the value of x ?

- A. 110
- B. 70
- C. 55
- D. 40



Note: Figure not drawn to scale.

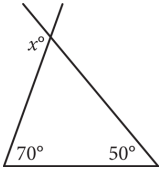
In the figure above, lines m and n are parallel.

What is the value of b ?

- A. 40
- B. 50
- C. 65
- D. 80

In a right triangle, the measure of one of the acute angles is 51° . What is the measure, in degrees, of the other acute angle?

- A. 6
- B. 39
- C. 49
- D. 51



In the figure above, two sides of a triangle are extended. What is the value of x ?

- A. 110
- B. 120
- C. 130
- D. 140