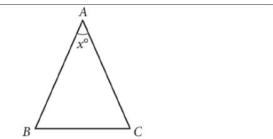


SAT Math

Lines, Angles, and Triangles 1

Question # ID

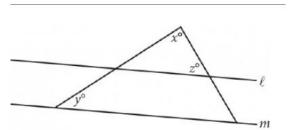
1.1 c8d60e48



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

1.2 a6dbad6b



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

1.3 cbe8ca31

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

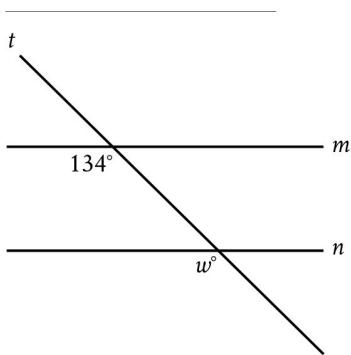
- A. 58°
- B. 74°
- C. 122°
- D. 212°

SAT Math

Lines, Angles, and Triangles 1

Question # **ID**

1.4 c24elbda



Note: Figure not drawn to scale.

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

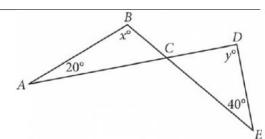
- A. 13
- B. 34
- C. 66
- D. 134

1.5 3563d76d

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

1.6 dfc420b2



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 ?

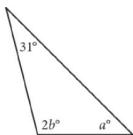
- A. 100
- B. 90
- C. 80
- D. 60

SAT Math

Lines, Angles, and Triangles 1

Question # ID

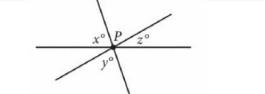
1.7 410bdb6



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

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

1.8 087cdcf

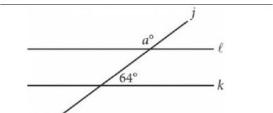


Note: Figure not drawn to scale.

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

1.9 992f4e93



Note: Figure not drawn to scale.

In the figure above, lines ℓ and k are parallel. What is the value of a ?

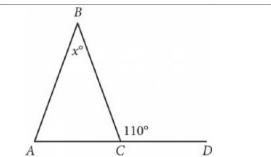
- A. 26
- B. 64
- C. 116
- D. 154

SAT Math

Lines, Angles, and Triangles 1

Question # ID

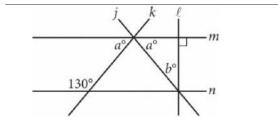
1.10 5733ce30



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

1.11 3828f53d



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

1.12 42b4493b

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?

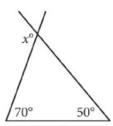
- A. 6
- B. 39
- C. 49
- D. 51

SAT Math

Lines, Angles, and Triangles 1

Question # ID

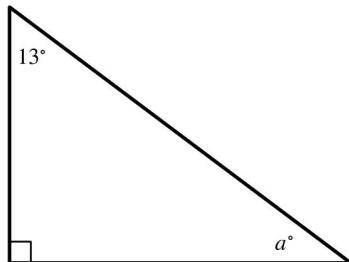
1.13 36200a38



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

1.14 69f4bbdc



Note: Figure not drawn to scale.

In the right triangle shown, what is the value of a ?

- A. 13
- B. 77
- C. 90
- D. 103

1.15 f1747a6a

In triangle ABC , the measure of angle B is 52° and the measure of angle C is 17° . What is the measure of angle A ?

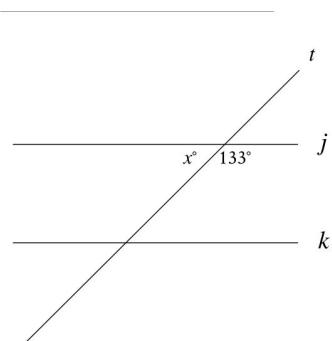
- A. 21°
- B. 35°
- C. 69°
- D. 111°

SAT Math

Lines, Angles, and Triangles 1

Question # ID

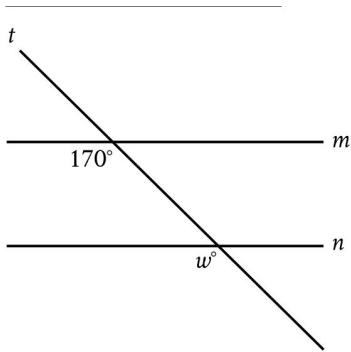
1.16 3b4b5b1e



Note: Figure not drawn to scale.

In the figure, line j is parallel to line k . What is the value of x ?

1.17 5207e508



Note: Figure not drawn to scale.

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

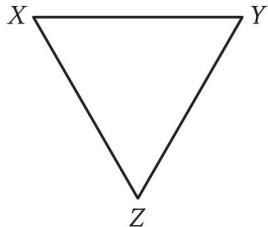
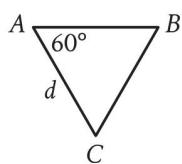
- A. 17
- B. 30
- C. 70
- D. 170

SAT Math

Lines, Angles, and Triangles 1

Question # ID

1.18 e0d2e21a

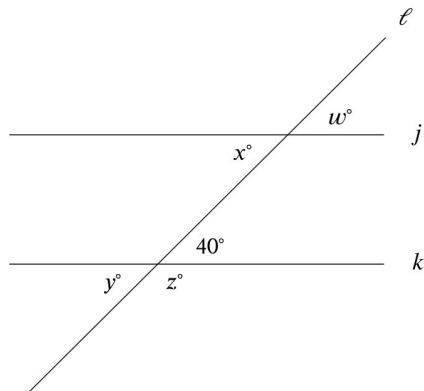


Note: Figures not drawn to scale.

For the triangles shown, triangle ABC is dilated by a scale factor of 3 to obtain triangle XYZ , where $d = 16$. What is the measure, in degrees, of angle X ?

- A. 20
- B. 57
- C. 60
- D. 63

1.19 9d078710



Note: Figure not drawn to scale.

In the figure shown, line ℓ intersects lines j and k . Which additional piece of information is sufficient to prove that lines j and k are parallel?

- A. $w = 40$
- B. $x = 140$
- C. $y = 40$
- D. $z = 140$