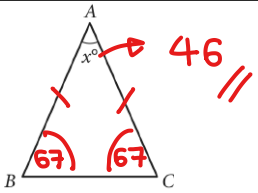
Question ID c8d60e48

P'PLEUM

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: c8d60e48

1.1



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

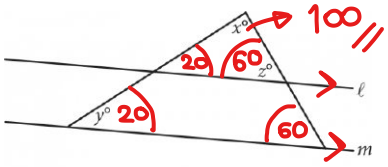
D. 70

Question ID a6dbad6b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: a6dbad6b

1.2



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

Question ID cbe8ca31

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: cbe8ca31

1.3

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°

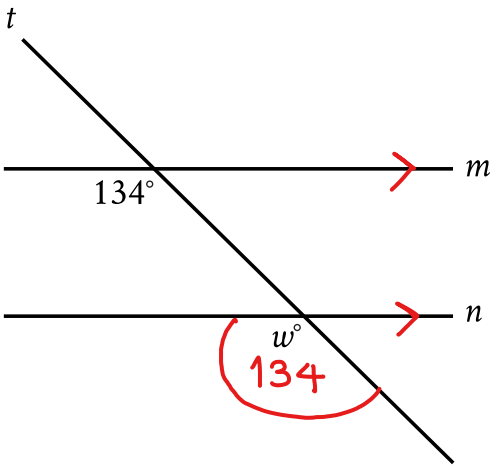
$180 - 24 - 98 = 58$

Question ID c24e1bda

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: c24e1bda

1.4



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

Question ID 3563d76d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 3563d76d

1.5

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

โจทย์ไม่บอกว่าเป็น similar แต่ต้องรู้เอง ไม่งั้นทำไม่ได้

$$\frac{555}{300} = \frac{X}{16}$$

$$X = 29.6$$

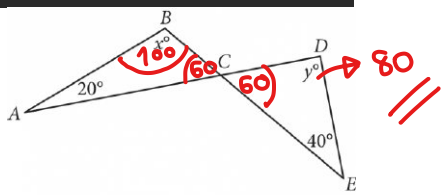
$$\approx 30 \;//$$

Question ID dfc420b2

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: dfc420b2

1.6



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

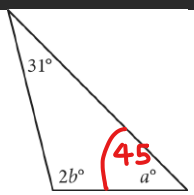
D. 60

Question ID 410bdbe6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 410bdbe6

1.7



$2b = 104$

$b = 52$ //

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

X A. 52

B. 59

C. 76

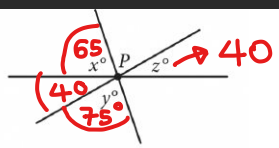
D. 104

Question ID 087cdcfd

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 087cdcfd

1.8



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

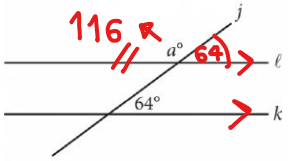
D. 20

Question ID 992f4e93

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 992f4e93

1.9



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

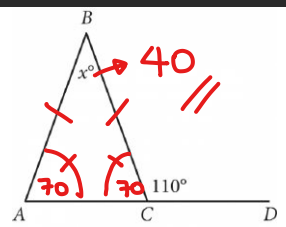
D. 154

Question ID 5733ce30

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 5733ce30

1.10



บอกให้รู้ว่าเป็นเส้นตรง ถ้าไม่บอกก็ต้องรู้เอง

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

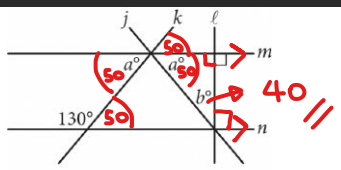
D. 40

Question ID 3828f53d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 3828f53d

1.11



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

Question ID 42b4493b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 42b4493b 1.12

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

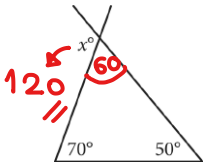
$180 - 51 - 90 = 39$ //

Question ID 36200a38

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 36200a38

1.13



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

A. 110

B. 120

C. 130

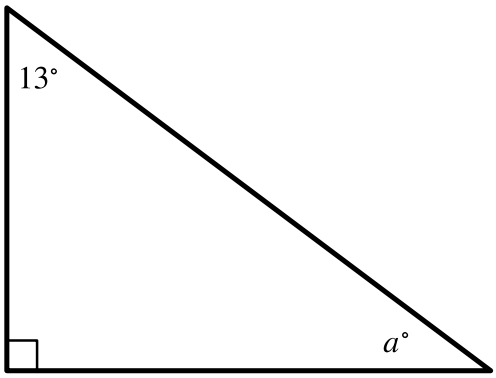
D. 140

Question ID 69f4bbdc

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	■□□

ID: 69f4bbdc

1.14



180 − 90 − 13 = 77 //

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