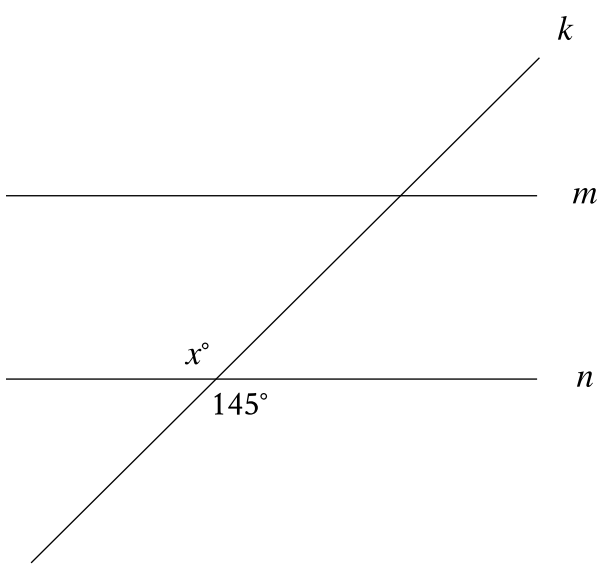
Question ID 4ee3fb4a

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

ID: 4ee3fb4a



Note: Figure not drawn to scale.

In the figure, line m is parallel to line n, and line k intersects both lines. Which of the following statements is true?

A. The value of x is less than 145.

B. The value of x is greater than 145.

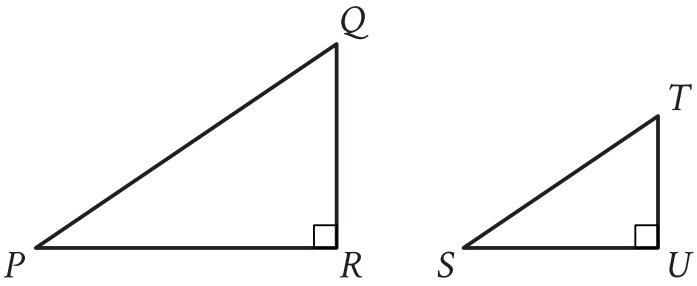
C. The value of x is equal to 145.

D. The value of x cannot be determined.

Question ID f963d751

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

ID: f963d751



Note: Figures not drawn to scale.

Right triangles PQR and STU are similar, where P corresponds to S. If the measure of angle Q is 18°, what is the measure of angle S?

A. 18°

B. 72°

C. 82°

D. 162°

Question ID 6e95d2bc

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

ID: 6e95d2bc

In $\triangle RST$, the measure of $\angle R$ is 63°. Which of the following could be the measure, in degrees, of $\angle S$?

A. 116

B. 118

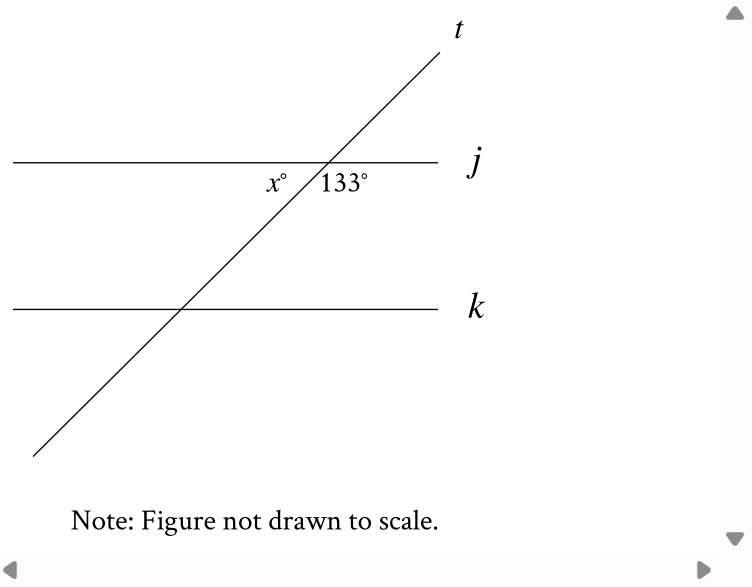
C. 126

D. 180

Question ID ea980ef3

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

ID: ea980ef3



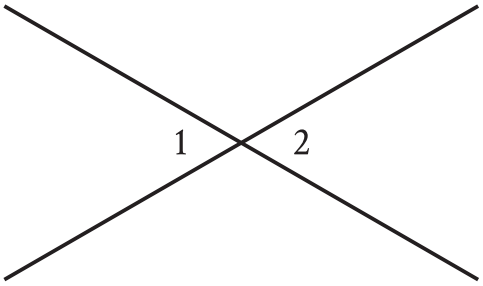
Note: Figure not drawn to scale.

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

Question ID 34dd43dc

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

ID: 34dd43dc



Note: Figure not drawn to scale.

In the figure, two lines intersect at a point. Angle 1 and angle 2 are vertical angles. The measure of angle 1 is 72°. What is the measure of angle 2?

A. 72°

B. 108°

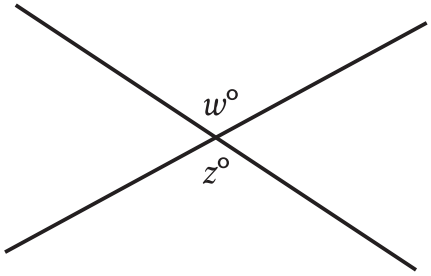
C. 144°

D. 288°

Question ID 9a00b5dc

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

ID: 9a00b5dc



Note: Figure not drawn to scale.

In the figure, two lines intersect at a point. If $w = 136$, what is the value of z?

A. 36

B. 44

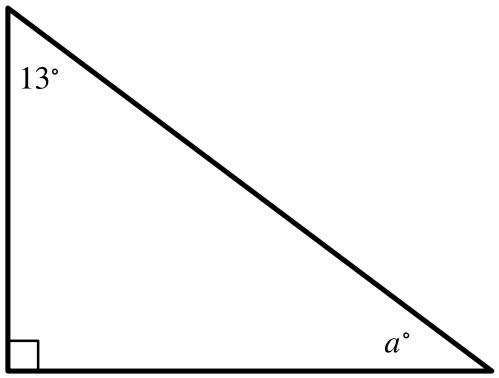
C. 68

D. 136

Question ID 1540f856

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

ID: 1540f856



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

Question ID aac3872b

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

ID: aac3872b

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°

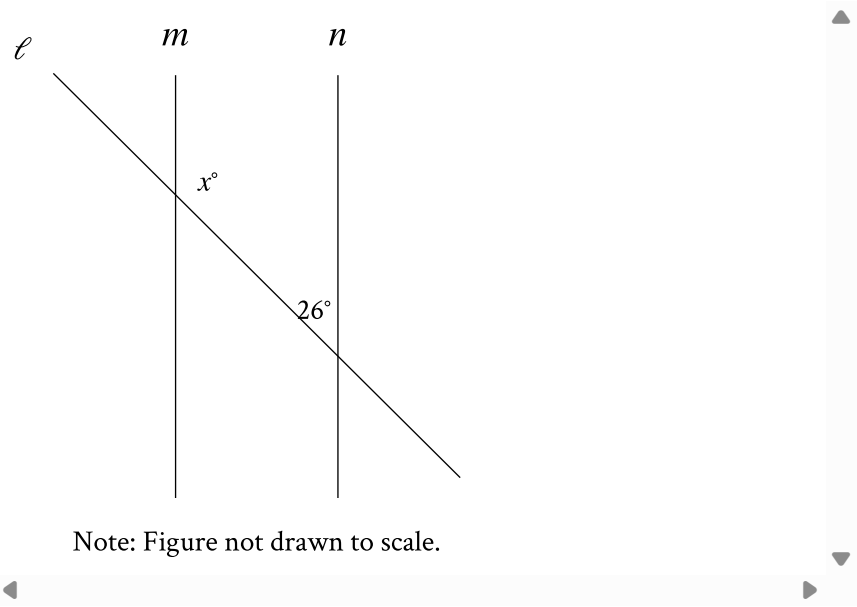
C. 69°

D. 111°

Question ID f47594d0

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

ID: f47594d0



Note: Figure not drawn to scale.

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

A. 13

B. 26

C. 52

D. 154

Question ID 1c55945b

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

ID: 1c55945b

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°

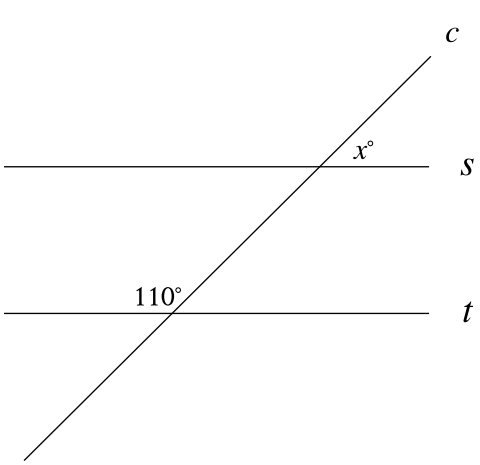
C. 91°

D. 179°

Question ID 8e5cbda2

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

ID: 8e5cbda2



Note: Figure not drawn to scale.

In the figure shown, line c intersects parallel lines s and t. What is the value of x?

Question ID e5cc491b

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

ID: e5cc491b

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°

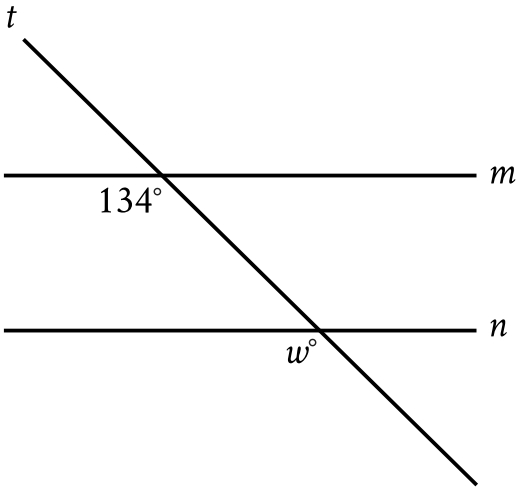
C. 122°

D. 212°

Question ID c655ab2f

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

ID: c655ab2f



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 2384a4cb

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

ID: 2384a4cb

In triangle ABC, $AB = 4{,}680$ millimeters (mm) and $BC = 4{,}680$ mm. Which statement is sufficient to prove that triangle ABC is equilateral?

A. $AC = 4{,}680$ mm

B. $AC = 468$ mm

C. $AC = 46.8$ mm

D. $AC = 4.68$ mm

Question ID 6e2abed7

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

ID: 6e2abed7

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

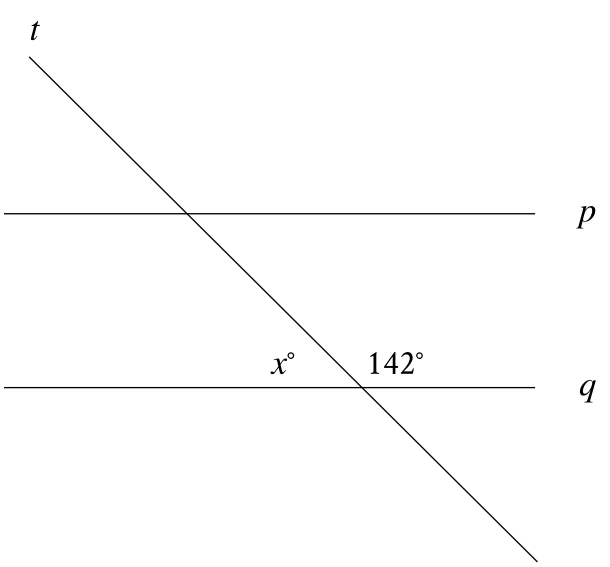
C. 49

D. 51

Question ID 03bd81f1

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

ID: 03bd81f1



Note: Figure not drawn to scale.

In the figure, line p is parallel to line q, and line t intersects both lines. What is the value of $x + 142$?

A. 52

B. 90

C. 142

D. 180

Question ID 027efe3c

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

ID: 027efe3c

Triangles ABC and DEF are congruent, where A corresponds to D, and B and E are right angles. The measure of angle A is 18°. What is the measure of angle F?

A. 18°

B. 72°

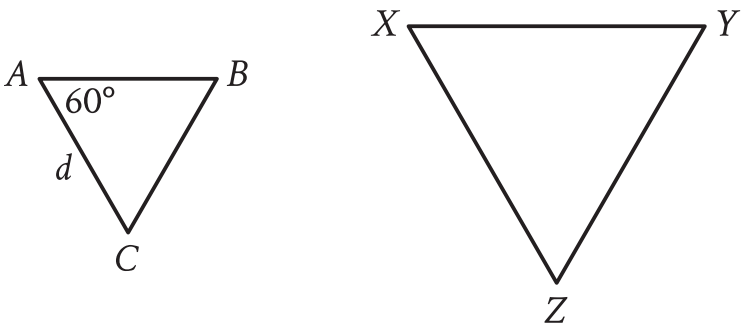
C. 90°

D. 162°

Question ID 3543e575

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

ID: 3543e575



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

Question ID 40a475f8

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

ID: 40a475f8

Triangles EFG and JKL are congruent, where E, F, and G correspond to J, K, and L, respectively. The measure of angle E is 45° and the measure of angle F is 20°. What is the measure of angle J?

A. 20°

B. 45°

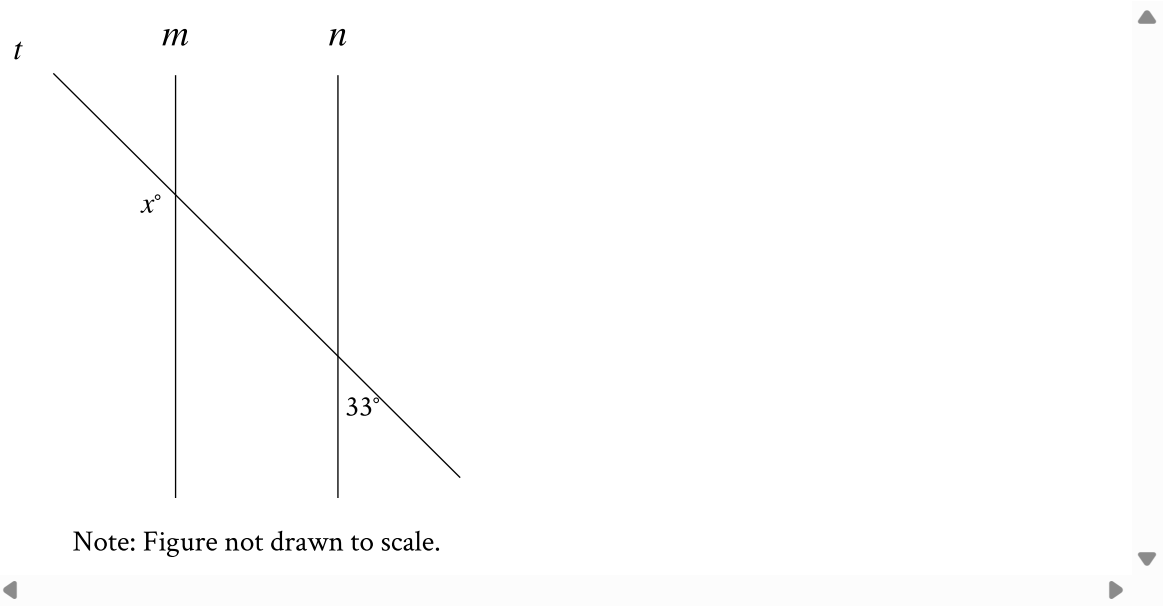
C. 135°

D. 160°

Question ID 6baaa5b3

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

ID: 6baaa5b3



Note: Figure not drawn to scale.

In the figure, line m is parallel to line n, and line t intersects both lines. What is the value of x?

A. 33

B. 57

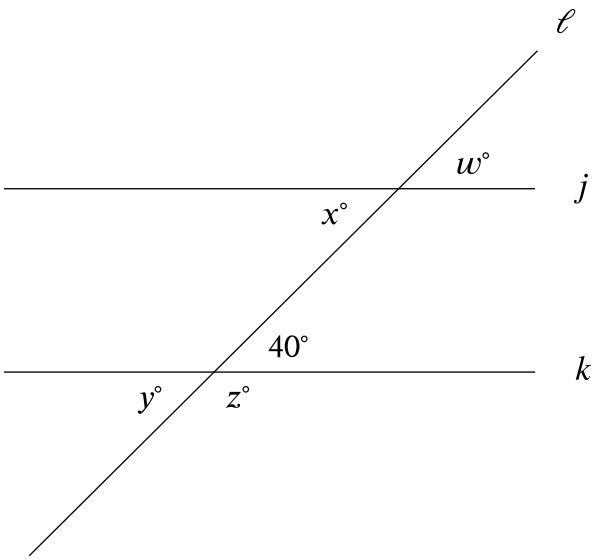
C. 123

D. 147

Question ID 8773f193

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

ID: 8773f193



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. $x = 140$

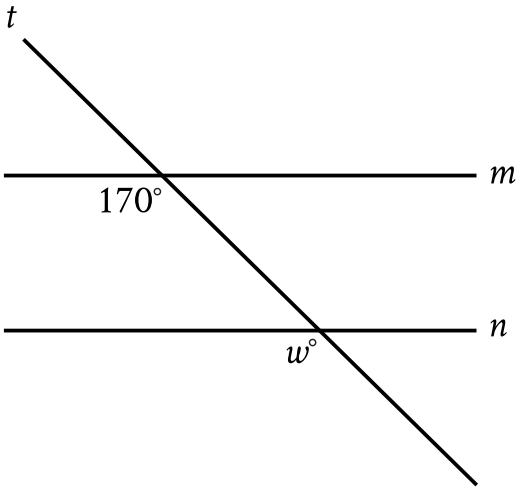
C. $y = 40$

D. $z = 140$

Question ID e01724ba

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

ID: e01724ba



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

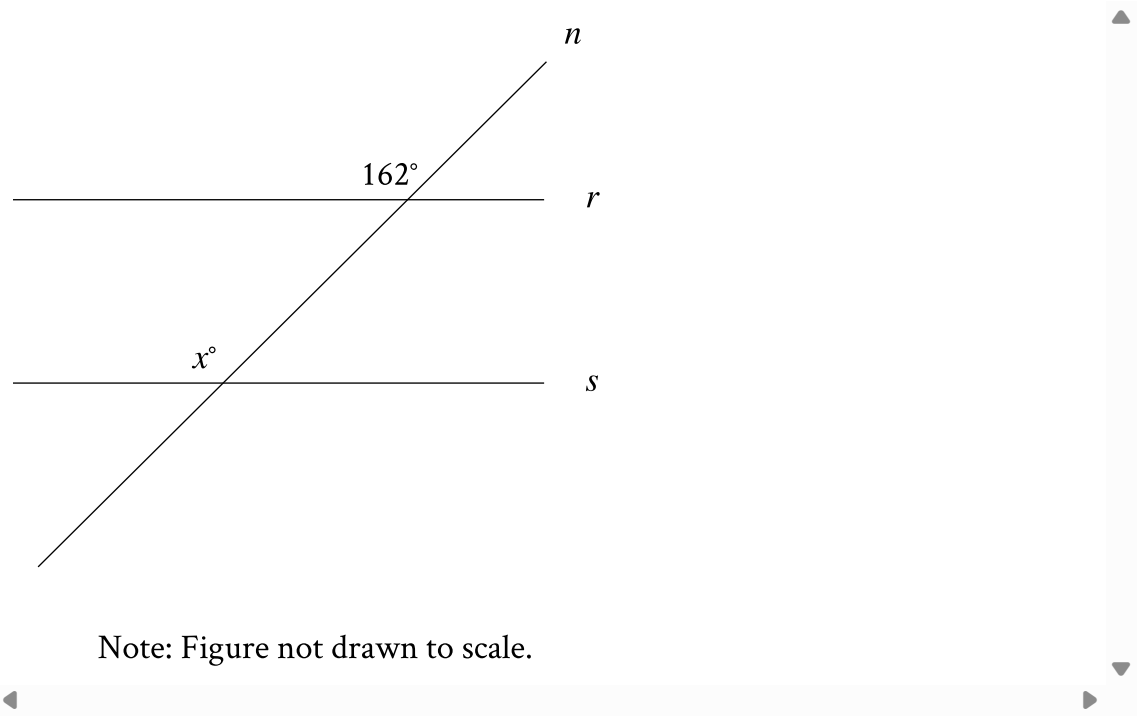
C. 70

D. 170

Question ID 08049d70

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

ID: 08049d70



Note: Figure not drawn to scale.

In the figure, line n intersects lines r and s. Line r is parallel to line s. What is the value of x?