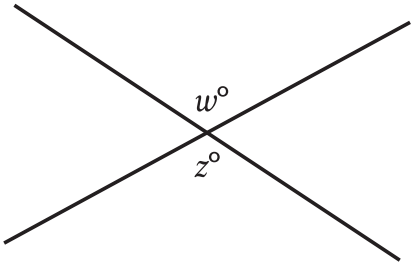


Question ID 0e245a77

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 0e245a77



Note: Figure not drawn to scale.

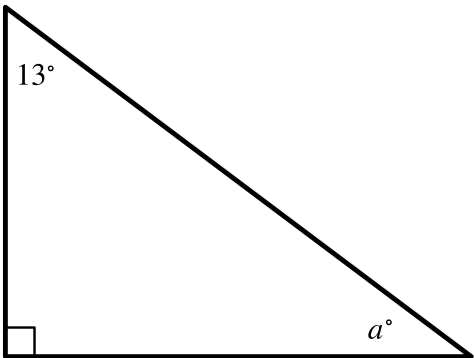
In the figure, two lines intersect at a point. If $w = 136$, what is the value of z ?

- A. 36
- B. 44
- C. 68
- D. 136

Question ID f9addc5d

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: f9addc5d



Note: Figure not drawn to scale.



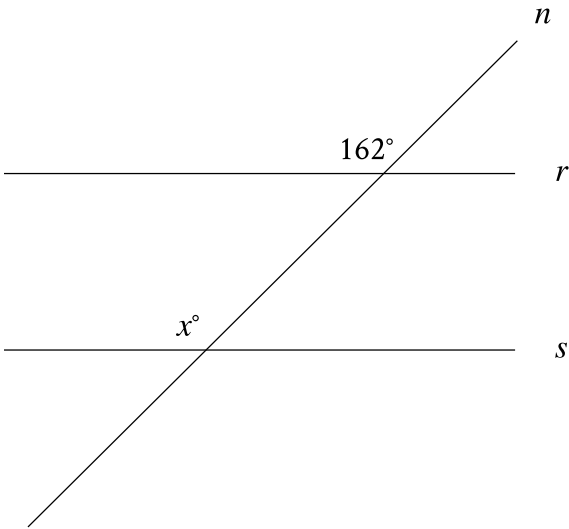
In the right triangle shown, what is the value of a ?

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

Question ID 77fea3f6

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 77fea3f6



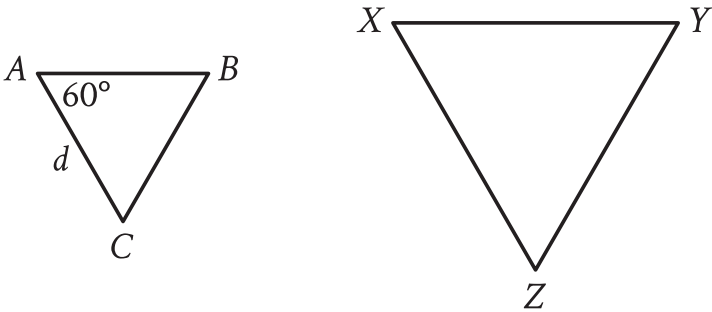
Note: Figure not drawn to scale.

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

Question ID 6cb8d47f

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 6cb8d47f



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 61c79894

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 61c79894

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 ae474eb4

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: ae474eb4

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 020141da

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 020141da

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 9bc228cb

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 9bc228cb

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 889921f9

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 889921f9

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 74343bea

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 74343bea

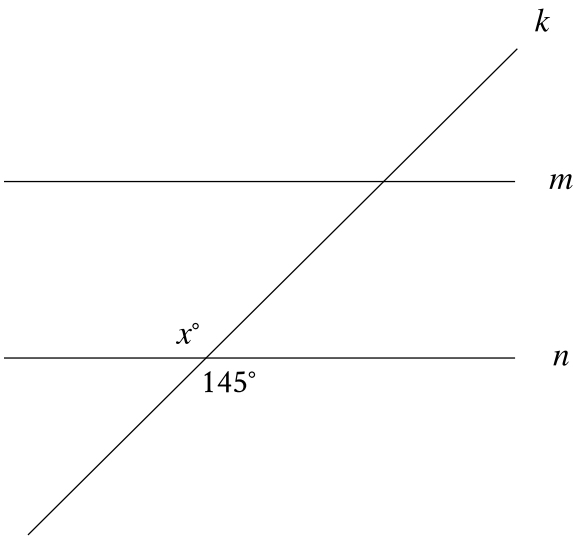
In $\triangle XYZ$, the measure of $\angle X$ is 24° and the measure of $\angle Y$ is 98° . What is the measure of $\angle Z$?

- A. 58°
- B. 74°
- C. 122°
- D. 212°

Question ID 832e0f0d

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 832e0f0d



Note: Figure not drawn to scale.

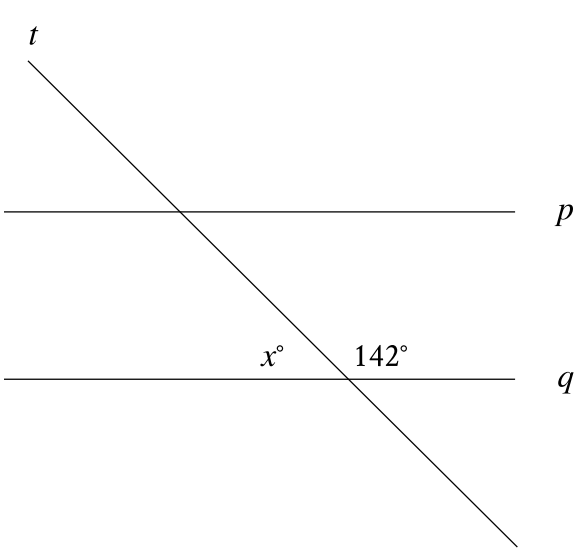
In the figure, line m is parallel to line n , and line k intersects both lines. Which of the following statements is true?

- 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 c0826656

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: c0826656



Note: Figure not drawn to scale.

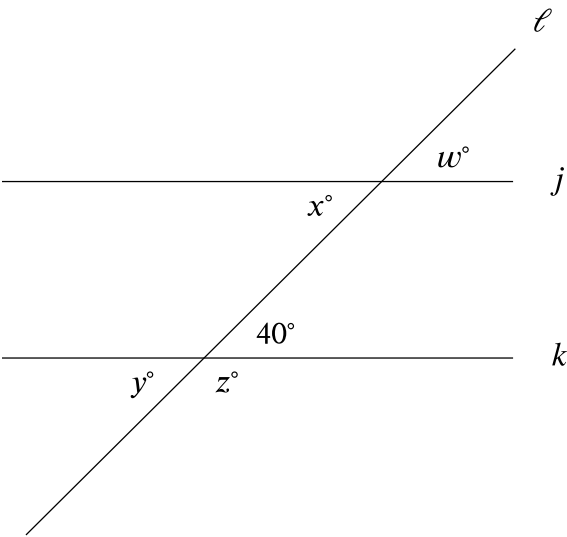
In the figure, line p is parallel to line q , and line t intersects both lines. What is the value of $x + 142$?

- A. 52
- B. 90
- C. 142
- D. 180

Question ID c2518db3

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: c2518db3



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 201ae66a

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Lines, angles, and triangles	<div><div></div><div></div><div></div></div>

ID: 201ae66a

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

- A. $AC = 4,680 \text{ mm}$
- B. $AC = 468 \text{ mm}$
- C. $AC = 46.8 \text{ mm}$
- D. $AC = 4.68 \text{ mm}$