Question ID 5460398e

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 5460398e

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 8c12e4da

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 8c12e4da

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°

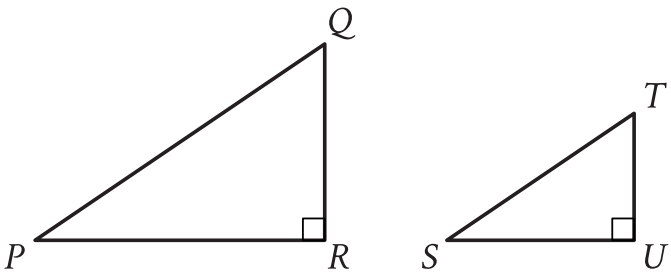
C. 69°

D. 111°

Question ID 7a12d469

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 7a12d469



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 ad5516fd

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: ad5516fd

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 fcf5cbea

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: fcf5cbea

In triangle JKL, the measures of $\angle K$ and $\angle L$ are each 48°. What is the measure of $\angle J$, in degrees? (Disregard the degree symbol when entering your answer.)

Question ID 51a28608

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 51a28608

Right triangles LMN and PQR are similar, where L and M correspond to P and Q, respectively. Angle M has a measure of 53°. What is the measure of angle Q?

A. 37°

B. 53°

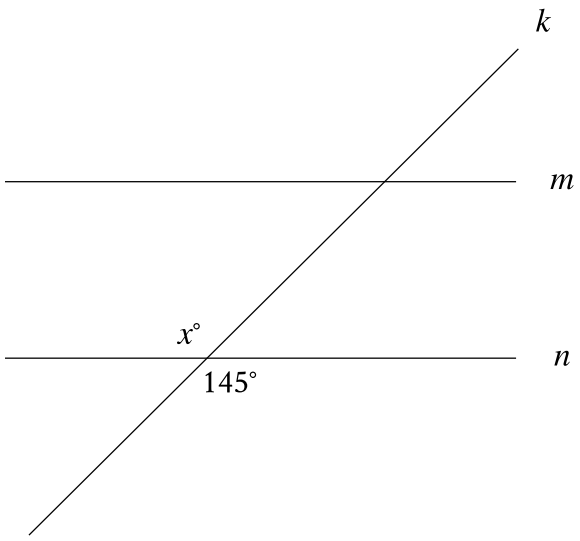
C. 127°

D. 143°

Question ID 9aa57971

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 9aa57971



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 cdd40566

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: cdd40566

Triangle ABC is similar to triangle XYZ, such that A, B, and C correspond to X, Y, and Z respectively. The length of each side of triangle XYZ is 2 times the length of its corresponding side in triangle ABC. The measure of side AB is 16. What is the measure of side XY?

A. 14

B. 16

C. 18

D. 32

Question ID 60c17d6e

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 60c17d6e

Two nearby trees are perpendicular to the ground, which is flat. One of these trees is 10 feet tall and has a shadow that is 5 feet long. At the same time, the shadow of the other tree is 2 feet long. How tall, in feet, is the other tree?

A. 3

B. 4

C. 8

D. 27

Question ID a3df7802

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: a3df7802

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

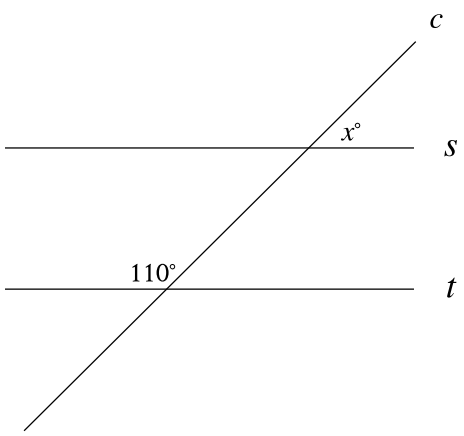
C. $AC = 46.8$ mm

D. $AC = 4.68$ mm

Question ID c3cae165

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: c3cae165



Note: Figure not drawn to scale.

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