

Question ID 35efc692

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Right triangles and trigonometry	

ID: 35efc692

In triangle ABC , angle B is a right angle. The length of side AB is $10\sqrt{37}$ and the length of side BC is $24\sqrt{37}$. What is the length of side AC ?

- A. $14\sqrt{37}$
- B. $26\sqrt{37}$
- C. $34\sqrt{37}$
- D. $\sqrt{34 \cdot 37}$

Question ID 57616839

Assessment	Test	Domain	Skill	Difficulty
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ID: 57616839

The length of a rectangle’s diagonal is $5\sqrt{17}$, and the length of the rectangle’s shorter side is 5 . What is the length of the rectangle’s longer side?

- A. $\sqrt{17}$

B. 20

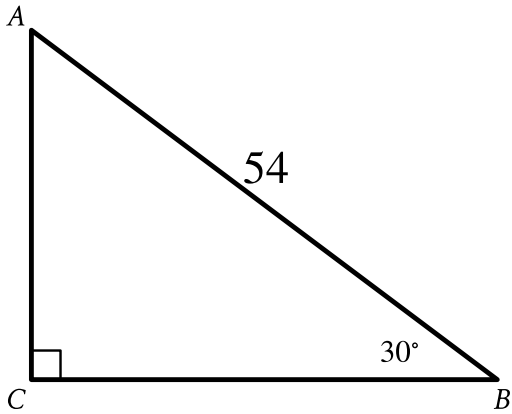
C. $15\sqrt{2}$

D. 400

Question ID 7e881644

Assessment	Test	Domain	Skill	Difficulty
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ID: 7e881644



Note: Figure not drawn to scale.



Right triangle ABC is shown. What is the value of $\tan A$?

- A. $\frac{\sqrt{3}}{54}$
- B. $\frac{1}{\sqrt{3}}$
- C. $\sqrt{3}$
- D. $27\sqrt{3}$

Question ID 93f7842a

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Right triangles and trigonometry	

ID: 93f7842a

The perimeter of an equilateral triangle is ~~624~~ centimeters. The height of this triangle is $k\sqrt{3}$ centimeters, where k is a constant. What is the value of k ?

Question ID a954e998

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Right triangles and trigonometry	

ID: a954e998

The length of a rectangle’s diagonal is $3\sqrt{17}$, and the length of the rectangle’s shorter side is **3**. What is the length of the rectangle’s longer side?

Question ID 036097b4

Assessment	Test	Domain	Skill	Difficulty
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ID: 036097b4

An isosceles right triangle has a perimeter of $94 + 94\sqrt{2}$ inches. What is the length, in inches, of one leg of this triangle?

- A. 47
- B. $47\sqrt{2}$
- C. 94
- D. $94\sqrt{2}$

Question ID 40780ef3

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Right triangles and trigonometry	

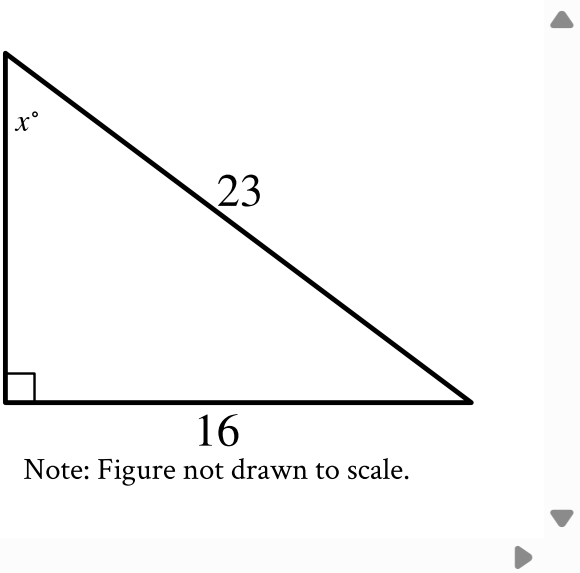
ID: 40780ef3

A rectangle is inscribed in a circle, such that each vertex of the rectangle lies on the circumference of the circle. The diagonal of the rectangle is twice the length of the shortest side of the rectangle. The area of the rectangle is $1,089\sqrt{3}$ square units. What is the length, in units, of the diameter of the circle?

Question ID f0333710

Assessment	Test	Domain	Skill	Difficulty
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ID: f0333710

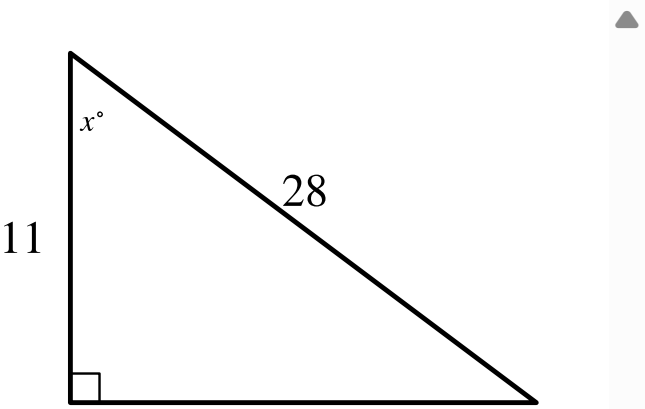


In the triangle shown, what is the value of $\sin x^\circ$?

Question ID 3f6e0eb2

Assessment	Test	Domain	Skill	Difficulty
PSAT/NMSQT & PSAT 10	Math	Geometry and Trigonometry	Right triangles and trigonometry	

ID: 3f6e0eb2



Note: Figure not drawn to scale.



In the triangle shown, what is the value of $\cos x^\circ$?

Question ID 00181f03

Assessment	Test	Domain	Skill	Difficulty
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ID: 00181f03

An isosceles right triangle has a hypotenuse of length **58** inches. What is the perimeter, in inches, of this triangle?

- A. $29\sqrt{2}$
- B. $58\sqrt{2}$
- C. $58 + 58\sqrt{2}$
- D. $58 + 116\sqrt{2}$

Question ID 2095ae72

Assessment	Test	Domain	Skill	Difficulty
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ID: 2095ae72

A square is inscribed in a circle. The radius of the circle is $\frac{20\sqrt{2}}{2}$ inches. What is the side length, in inches, of the square?

- A. 20
- B. $\frac{20\sqrt{2}}{2}$
- C. $20\sqrt{2}$
- D. 40

Question ID 49570665

Assessment	Test	Domain	Skill	Difficulty
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ID: 49570665

A right triangle has legs with lengths of **24** centimeters and **21** centimeters. If the length of this triangle's hypotenuse, in centimeters, can be written in the form **$3\sqrt{d}$** , where **d** is an integer, what is the value of **d** ?