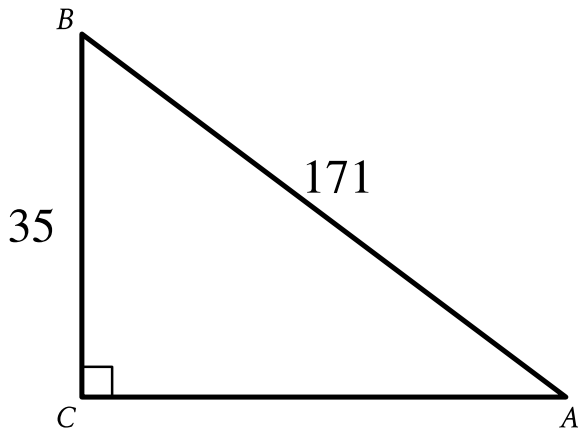
Question ID a8417ef2

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: a8417ef2



Note: Figure not drawn to scale.

In the right triangle shown, what is the value of $\sin A$?

A. $\frac{1}{171}$

B. $\frac{35}{171}$

C. $\frac{171}{35}$

D. 171

Question ID 5def1eea

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: 5def1eea

A right triangle has legs with lengths of 11 centimeters and 9 centimeters. What is the length of this triangle's hypotenuse, in centimeters?

A. $\sqrt{40}$

B. $\sqrt{202}$

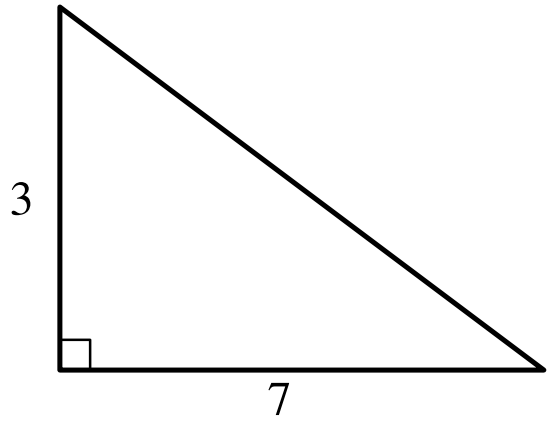
C. 20

D. 202

Question ID 377c4069

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: 377c4069



Note: Figure not drawn to scale.

The lengths of the legs of a right triangle are shown. Which of the following is closest to the length of the triangle's hypotenuse?

A. 3.2

B. 5

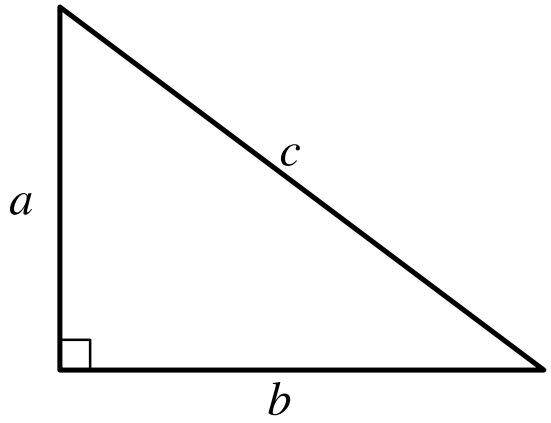
C. 7.6

D. 20

Question ID 8cbc6dc5

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: 8cbc6dc5



Note: Figure not drawn to scale.

For the right triangle shown, $a = 4$ and $b = 5$. Which expression represents the value of c?

A. $4 + 5$

B. $\sqrt{(4)(5)}$

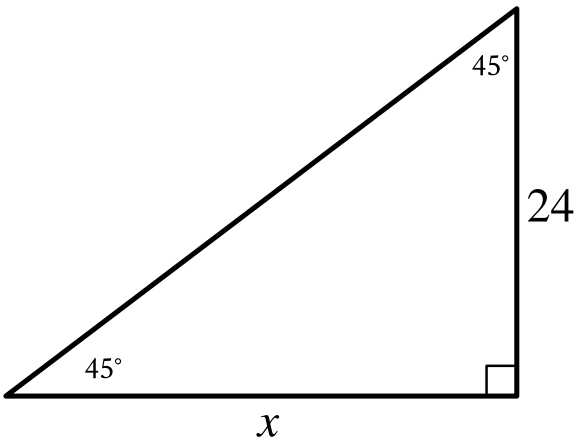
C. $\sqrt{4 + 5}$

D. $\sqrt{4^2 + 5^2}$

Question ID b56d6fef

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: b56d6fef



Note: Figure not drawn to scale.

In the triangle shown, what is the value of x?

A. 24

B. 45

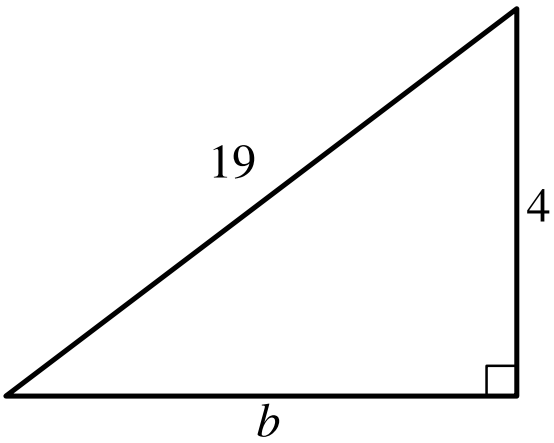
C. 48

D. 69

Question ID 7bd4ca87

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: 7bd4ca87



Note: Figure not drawn to scale.

Which equation shows the relationship between the side lengths of the given triangle?

A. $4b = 19$

B. $4 + b = 19$

C. $4^2 + b^2 = 19^2$

D. $4^2 - b^2 = 19^2$

Question ID f6b6c4bc

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: f6b6c4bc

Triangle ABC is similar to triangle DEF, where angle A corresponds to angle D, and angles C and F are right angles. If $\cos B = \frac{1}{22}$, what is the value of $\cos E$?

A. $\frac{1}{22}$

B. $\frac{1}{23}$

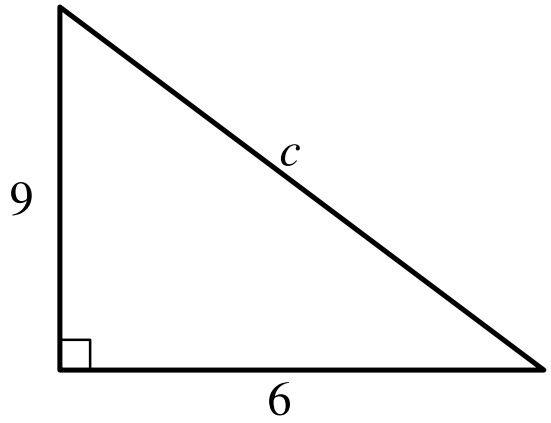
C. $\frac{21}{22}$

D. $\frac{22}{23}$

Question ID 6b2b9230

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: 6b2b9230



Note: Figure not drawn to scale.

In the right triangle shown, which of the following is closest to the value of c?

A. 7.5

B. 10.8

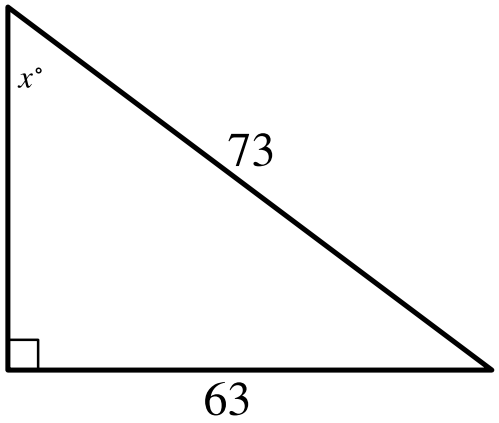
C. 15

D. 58.5

Question ID c5fdc5b9

Assessment	Test	Domain	Skill	Difficulty
PSAT 8/9	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: c5fdc5b9



Note: Figure not drawn to scale.

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

A. $\frac{1}{73}$

B. $\frac{10}{73}$

C. $\frac{63}{73}$

D. $\frac{136}{73}$