#1

ID: bcb66188

Triangle FGH is similar to triangle JKL, where angle F corresponds to angle J and angles G and K are right angles. If $\sin(F) = \frac{308}{317}$, what is the value of $\sin(J)$?

A) $\frac{75}{317}$

B) $\frac{308}{317}$

C) $\frac{317}{308}$

D) $\frac{317}{75}$

#2

ID: 33e29881

In right triangle RST, the sum of the measures of angle R and angle S is 90 degrees. The value of $\sin(R)$ is $\frac{\sqrt{15}}{4}$. What is the value of $\cos(S)$?

A) $\frac{\sqrt{15}}{15}$

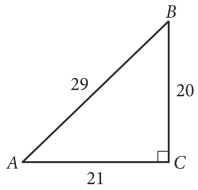
B) $\frac{\sqrt{15}}{4}$

C) $\frac{4\sqrt{15}}{15}$

D) $\sqrt{15}$

#3

ID: 902dc959



In the figure above, what is the value of $\tan(A)$?

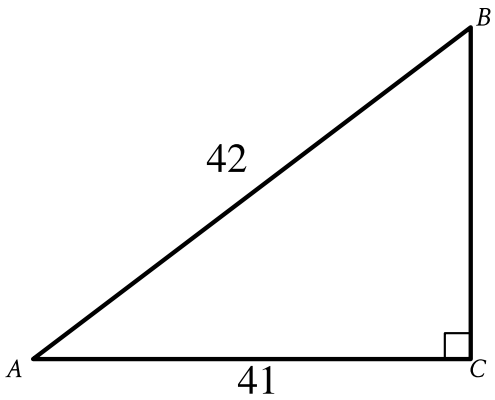
A) $\frac{20}{29}$

B) $\frac{21}{29}$

C) $\frac{20}{21}$

D) $\frac{21}{20}$

#4 ID: 2bddbc1b



Note: Figure not drawn to scale.

What is the value of $\cos A$ in the triangle shown?

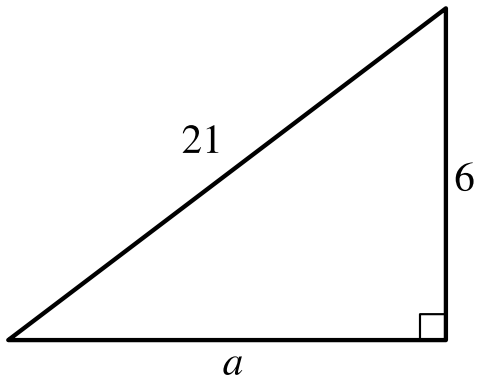
A) $\frac{42}{41}$

B) $\frac{41}{42}$

C) $\frac{1}{42}$

D) $\frac{1}{41}$

#5 ID: de550be0



Note: Figure not drawn to scale.

For the triangle shown, which expression represents the value of a ?

A) $\sqrt{21^2 - 6^2}$

B) $21^2 - 6^2$

C) $\sqrt{21 - 6}$

D) $21 - 6$

#6 ID: 7700d098

One leg of a right triangle has a length of 43.2 millimeters. The hypotenuse of the triangle has a length of 196.8 millimeters. What is the length of the other leg of the triangle, in millimeters?

A) 43.2

B) 120

C) 192

D) 201.5

#7 ID: 9ec76b54

A right triangle has legs with lengths of 28 centimeters and 20 centimeters. What is the length of this triangle's hypotenuse, in centimeters?

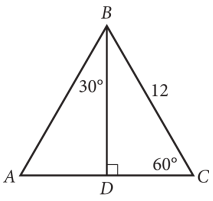
A) $8\sqrt{6}$

B) $4\sqrt{74}$

C) 48

D) $1{,}184$

#8 ID: bf8d843e



In ΔABC above, what is the length of $\overline{AD}$?

A) 4

B) 6

C) $6\sqrt{2}$

D) $6\sqrt{3}$

#9 ID: a5aee181

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?

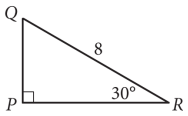
A) $\sqrt{17}$

B) 20

C) $15\sqrt{2}$

D) 400

#10 ID: 13d9a1c3



In the right triangle shown above, what is the length of $\overline{PQ}$?