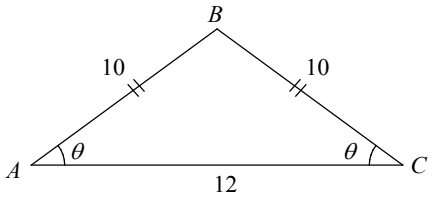
Exercises - Trigonometric Ratios of Acute Angles

Questions 1- 3 refer to the following information.

In the triangle shown below $AB = BC = 10$ and $AC = 12$.



1

What is the value of $\cos\theta$?

A) 0.4

B) 0.6

C) 0.8

D) 1.2

2

What is the value of $\sin\theta$?

A) 0.4

B) 0.6

C) 0.8

D) 1.2

3

What is the value of $\tan\theta$?

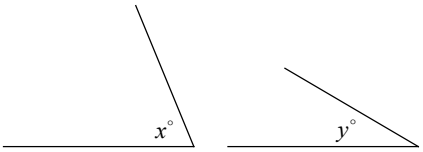
A) $\frac{3}{4}$

B) $\frac{4}{3}$

C) $\frac{5}{4}$

D) $\frac{5}{3}$

4



Note: Figures not drawn to scale.

In the figures above $y < x < 90$ and $\cos x^\circ = \sin y^\circ$. If $x = 3a - 14$ and $y = 50 - a$, what is the value of a?

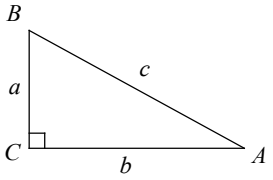
A) 16

B) 21

C) 24

D) 27

5



Given the right triangle ABC above, which of the following is equal to $\frac{a}{c}$?

I. $\sin A$

II. $\cos B$

III. $\tan A$

A) I only

B) II only

C) I and II only

D) II and III only