

# Inverse Trig Functions

## Inverse Trigonometric Ratios

Find each angle measure to the nearest degree.

1)  $\sin B = 0.4848$

2)  $\sin A = 0.5150$

3)  $\cos A = 0.7431$

4)  $\cos W = 0.6157$

5)  $\cos A = 0.5878$

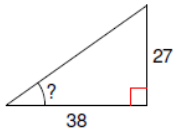
6)  $\tan W = 19.0811$

7)  $\cos A = 0.4226$

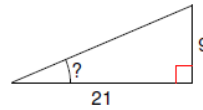
8)  $\tan W = 0.5317$

Find the measure of the indicated angle to the nearest degree.

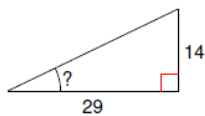
9)



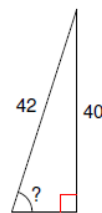
10)



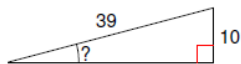
11)



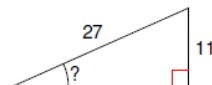
12)



13)



14)



# Inverse Trig Functions

## Inverse Trigonometric Ratios

Find each angle measure to the nearest degree.

1)  $\sin B = 0.4848$

$29^\circ$

2)  $\sin A = 0.5150$

$31^\circ$

3)  $\cos A = 0.7431$

$42^\circ$

4)  $\cos W = 0.6157$

$52^\circ$

5)  $\cos A = 0.5878$

$54^\circ$

6)  $\tan W = 19.0811$

$87^\circ$

7)  $\cos A = 0.4226$

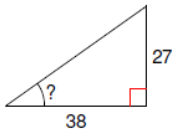
$65^\circ$

8)  $\tan W = 0.5317$

$28^\circ$

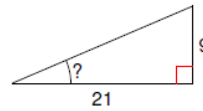
Find the measure of the indicated angle to the nearest degree.

9)



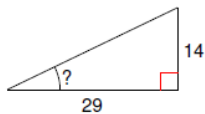
$35^\circ$

10)



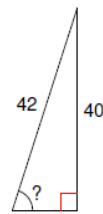
$23^\circ$

11)



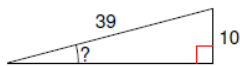
$26^\circ$

12)



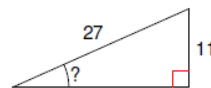
$72^\circ$

13)



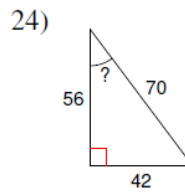
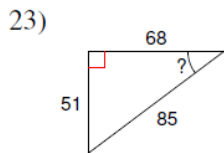
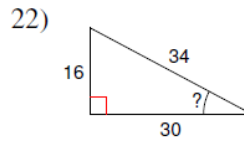
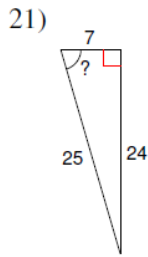
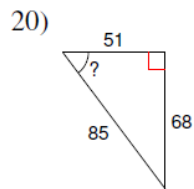
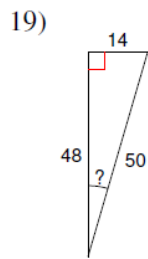
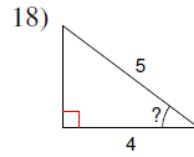
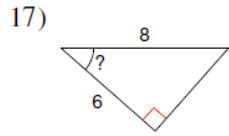
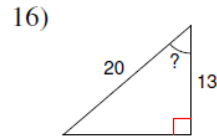
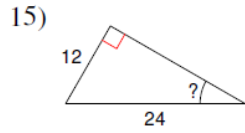
$15^\circ$

14)



$24^\circ$

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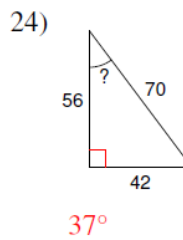
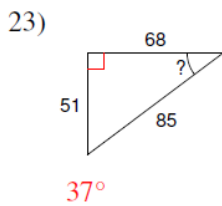
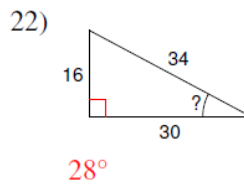
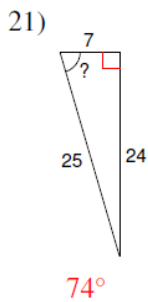
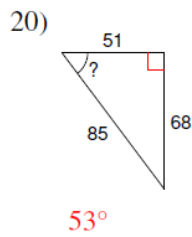
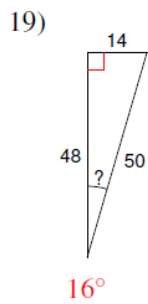
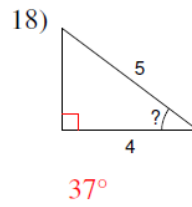
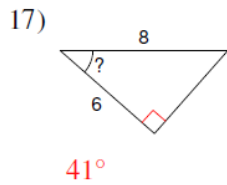
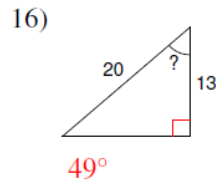
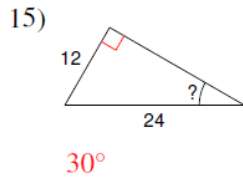


## Critical thinking questions:

25) Find an angle  $x$  where  $\sin x = \cos x$ .

26) Draw and label all three sides of a right triangle that has a  $40^\circ$  angle and a hypotenuse of 10 cm.

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## Critical thinking questions:

25) Find an angle  $x$  where  $\sin x = \cos x$ .  
 $45^\circ$

26) Draw and label all three sides of a right triangle that has a  $40^\circ$  angle and a hypotenuse of 10 cm.  
Sides are: 10 cm, 6.4 cm, and 7.7 cm.