Score: 1 of 1 pt | 1 of 43 | **Test**

5.1.15

Convert the following angle to decimal degree notation.

$45° 48'$

$45° 48' \approx 45.8$ °

(Round to two decimal places as needed.)

Review Quiz: Practice Quiz 8 (Chapter 5)

Score: 1 of 1 pt | 2 of 43

5.1.17

Convert the following angle to decimal degrees.

$\alpha = 30° 16' 21''$

$\alpha \approx 30.2725$ °

(Round to four decimal places.)

Score: 1 of 1 pt | 3 of 43

5.1.21

Convert the angle to DMS notation.

$50.33°$

$50.33° = 50$ ° 19 ' 48 ''

Score: 1 of 1 pt | 4 of 43 | Te

5.1.29

Convert the angle in degrees to radians.

$-360°$

$-360° = -2\pi$ radian(s)

(Simplify your answer. Type an exact answer in terms of π. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt | 5 of 43 | **Test Score:** 92

5.1.33

Convert the following degree measure to radian measure.

$600°$

$600° = \frac{10\pi}{3}$ radians

(Simplify your answer. Type an integer or a fraction. Type an exact answer in terms of π.)

Score: 1 of 1 pt | 6 of 43

5.1.35

Convert the angle in degrees to radians.

$-420°$

$-420° = -\frac{7\pi}{3}$ radians

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt

7 of 43

5.1.37

Convert the angle in radians to degrees.

$\frac{\pi}{6}$

$\frac{\pi}{6} =$ 30 °

(Simplify your answer.)

Score: 1 of 1 pt

8 of 43

5.1.39

Convert the following radian measure to degree measure.

$-\frac{5\pi}{4}$

$-\frac{5\pi}{4} =$ −225 °

Score: 1 of 1 pt

9 of 43

5.1.47

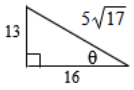
Convert the angle from degrees to radians.

259°

259° ≈ 4.52 radian(s) (Round to two decimal places as needed.)

5.2.7

Find the exact values for the six trigonometric functions of the angle θ in the figure.



$\sin\theta = \frac{13\sqrt{17}}{85}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed. Rationalize the denominator.)

$\cos\theta = \frac{16\sqrt{17}}{85}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed. Rationalize the denominator.)

$\tan\theta = \frac{13}{16}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed. Rationalize the denominator.)

$\csc\theta = \frac{5\sqrt{17}}{13}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed. Rationalize the denominator.)

$\sec\theta = \frac{5\sqrt{17}}{16}$

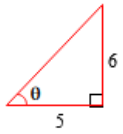
(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed. Rationalize the denominator.)

$\cot\theta = \frac{16}{13}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed. Rationalize the denominator.)

5.2.11

Find the six trigonometric function values of the specified angle.



$\sin\theta = \frac{6\sqrt{61}}{61}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

$\cos\theta = \frac{5\sqrt{61}}{61}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

$\tan\theta = \frac{6}{5}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

$\sec\theta = \frac{\sqrt{61}}{5}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

$\csc\theta = \frac{\sqrt{61}}{6}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

$\cot\theta = \frac{5}{6}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

5.2.23

Use the given trigonometric function value of to find the five other trigonometric function values of the acute angle θ. Rationalize the denominators wher

$\sec\theta = \frac{85}{84}$

$\sin\theta =$ $\frac{13}{85}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Rationalize the denominator.)

$\cos\theta =$ $\frac{84}{85}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Rationalize the denominator.)

$\tan\theta =$ $\frac{13}{84}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Rationalize the denominator.)

$\csc\theta =$ $\frac{85}{13}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Rationalize the denominator.)

$\cot\theta =$ $\frac{84}{13}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Rationalize the denominator.)

5.2.27

Find the trigonometric function value of the corresponding complementary angle.

Given that **sin** $70^\circ \approx 0.9397$, find **cos** 20°.

cos $20^\circ \approx$ .9397

(Type an integer or decimal rounded to four decimal places as needed.)

Score: 0 of 1 pt 14 of 43

5.2.33

Use table for trigonometric function values of some common angles and simplify the resulting expression.

$\cos 30^\circ \cos 60^\circ + \sin 60^\circ \sin 30^\circ$

$\cos 30^\circ \cos 60^\circ + \sin 60^\circ \sin 30^\circ = \frac{\sqrt{3}}{2}$

(Simplify your answer. Type an exact answer, using radicals as needed. Type an integer or a fraction.)

You answered: $\frac{2\sqrt{3}}{4}$

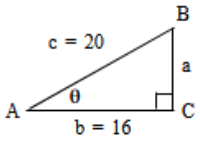
Get answer feedback

This is wrong because I didn't simplify

Score: 1 of 1 pt 15 of 43 **Test**

5.2.47

Use the figure below and the given values to find the specified side length and trigonometric function value. Find a, $\sin\theta$, $\tan\theta$.



The length of the missing side of the right triangle is a = 12.

$\sin\theta = \frac{3}{5}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

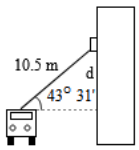
$\tan\theta = \frac{3}{4}$

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt | 16 of 43 | **Test Score:** 92.25%, 39.67 of

5.2.63

A 10.5-m fire truck ladder is leaning against a wall. Find the distance d the ladder goes up the wall (above the fire truck) if the ladder makes an angle of 43° 31' with the horizontal.



$d \approx 7.23$ m

(Simplify your answer. Type an integer or a decimal. Round to the nearest hundredth.)

Score: 1 of 1 pt | 17 of 43

5.3.23

Find the exact value of the quadrantal angle.

sin 540°

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A. **sin** 540° = 0
- B. The value is undefined.

Score: 1 of 1 pt | 18 of 43

5.3.27

Find the exact value.

tan (− 1710°)

Select the correct choice below and fill in any answer boxes in your choice.

- A. **tan** (− 1710°) =

  (Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.)
- B. The answer is undefined.

Score: 1 of 1 pt | 19 of 43 | **Test Score:** 92.25%, 39.

5.3.29

Find the exact value of **tan** (-315°).

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. The exact value of **tan** (-315°) is 1.
(Type an exact answer, using radicals as needed. Use integers or fractions for any numbers in the expression. Rationalize all denominators.)

B. The value of **tan** (-315°) is undefined.

Score: 1 of 1 pt | 20 of 43 | **Test Score:** 92.25%, 39.67 of 43 pt

5.3.33

Find the exact value.

sin (-1530°)

Select the correct choice below and fill in any answer boxes in your choice.

A. **sin** $(-1530^\circ) = -1$
(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression. Type an exact answer, using radicals as needed.)

B. The answer is undefined.

Score: 1 of 1 pt | 21 of 43

5.3.37

Find the exact value. Do not use a calculator.

tan (6π)

Select the correct choice below and fill in any answer boxes in your choice.

A. **tan** $(6\pi) = 0$
(Type an exact answer, using radicals as needed. Rationalize all denominators.)

B. The answer is undefined.

Score: 1 of 1 pt

5.3.39

Find the exact value of the quadrantal angle.

$$\csc \frac{5\pi}{2}$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $\csc \frac{5\pi}{2} = 1$

B. The value is undefined.

Score: 1 of 1 pt

5.3.43

Find the exact value of the following expression.

$$\cos\left(\frac{\pi}{2}\right)$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

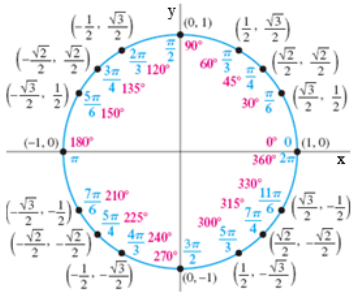
A. $\cos\left(\frac{\pi}{2}\right) = 0$

(Type an exact answer, using radicals as needed.)

B. The answer is undefined.

5.3.81

Use the figure shown below and the definition of the circular functions to find the exact values for **sin** s, **cos** s, and **tan** s for $s = \frac{2\pi}{3}$.



complete your choice.

(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Rationalize all denominators.)

A. **sin** s = $\frac{\sqrt{3}}{2}$

B. The value of **sin** s is undefined.

Determine **cos** s.
Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Rationalize all denominators.)

A. **cos** s = $-\frac{1}{2}$

B. The value of **cos** s is undefined.

Determine **tan** s.
Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

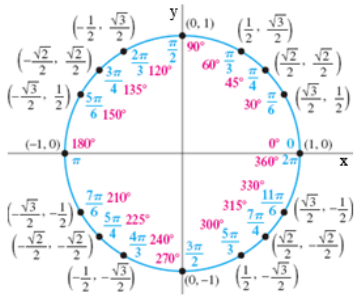
(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Rationalize all denominators.)

A. **tan** s = $-\sqrt{3}$

B. The value of **tan** s is undefined.

5.3.83

Use the figure shown below and the definition of the circular functions to find the exact values for **sin** s, **cos** s, and **tan** s for $s = \frac{\pi}{4}$.



complete your choice.

(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Rationalize all denominators.)

A. **sin** s = $\frac{\sqrt{2}}{2}$

B. The value of **sin** s is undefined.

Determine **cos** s.
Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Rationalize all denominators.)

A. **cos** s = $\frac{\sqrt{2}}{2}$

B. The value of **cos** s is undefined.

Determine **tan** s.
Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Rationalize all denominators.)

A. **tan** s = 1

B. The value of **tan** s is undefined.

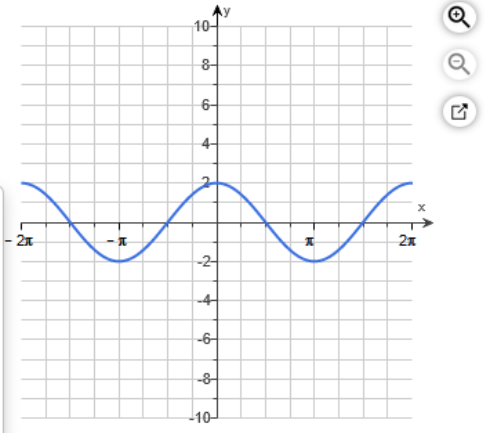
Score: 1 of 1 pt | 26 of 43 | **Test Score:** 92.25%, 39.6

5.4.9

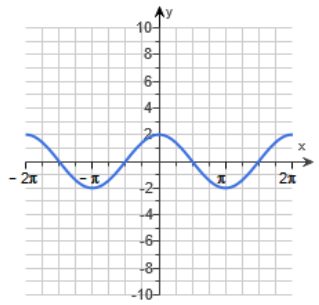
Sketch the graph of the given equation over the interval $[-2\pi, 2\pi]$.

$y = 2\cos x$

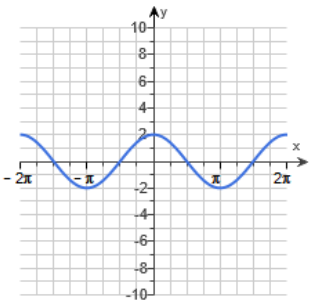
Use the graphing tool to graph the equation. Type pi to insert π as needed.



Correct answer:



Your answer:



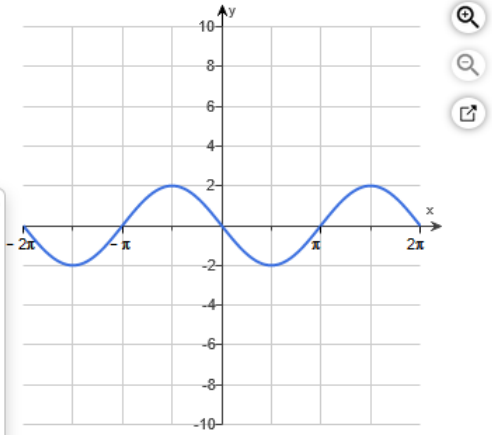
Score: 1 of 1 pt | 27 of 43 | **Test Score:** 92.25%, 39

5.4.11

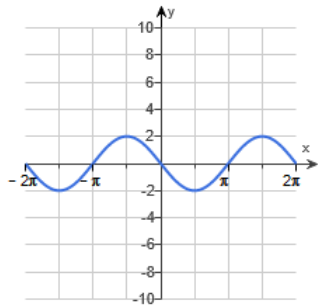
Sketch the graph of the given equation over the interval $[-2\pi, 2\pi]$.

$y = -2\sin x$

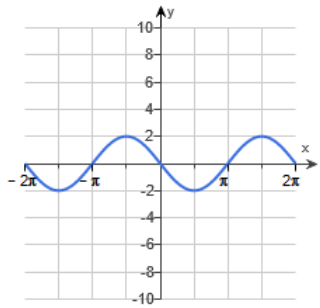
Use the graphing tool to graph the equation. Type pi to insert π as needed.



Correct answer:



Your answer:



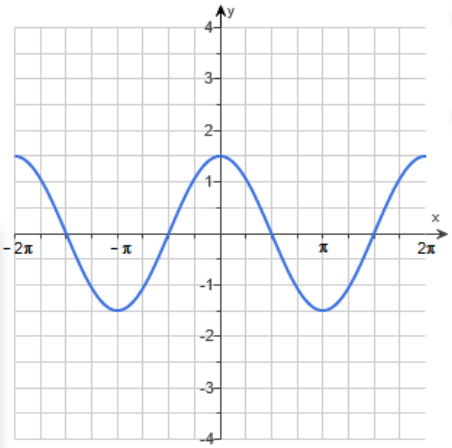
Score: 1 of 1 pt | 28 of 43 | **Test Score:** 92.25%

5.4.13

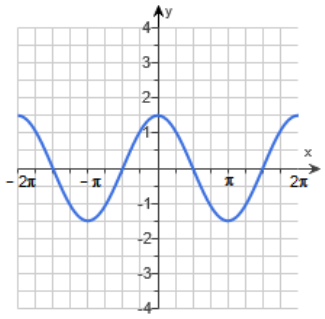
Sketch the graph of the given equation over the interval $[-2\pi, 2\pi]$.

$$y = \frac{3}{2}\cos x$$

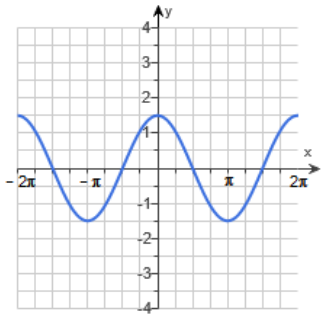
Use the graphing tool to graph the function.



Correct answer:



Your answer:



Score: 0.67 of 1 pt | 29 of 43 | **Test S**

5.4.29

Find the amplitude, period, and phase shift of the given function.

$$y = 4\cos\left(x - \frac{\pi}{8}\right)$$

The amplitude is 4.
(Simplify your answer. Type an exact answer, using π as needed. Use integers or decimals for any numbers in the expression.)

The period is 2π.
(Simplify your answer. Type an exact answer, using π as needed. Use integers or decimals for any numbers in the expression.)

The phase shift is $\frac{\pi}{8}$.
(Simplify your answer. Type an exact answer, using π as needed. Use integers or decimals for any numbers in the expression.)

You answered: $-\frac{\pi}{8}$

Get answer feedback

Here the phase shift you do not carry over the "-" symbol. This is why it's incorrect.

Score: 1 of 1 pt

30 of 43

5.4.35

Find the amplitude, period, and phase shift of the given function.

$$y = 0.4 \cos 0.125\left(x + \frac{\pi}{12}\right)$$

The amplitude is .4.
(Type an exact answer, using π as needed. Use integers or decimals for any numbers in the expression.)

The period is 16π.
(Type an exact answer, using π as needed. Use integers or decimals for any numbers in the expression.)

The phase shift is $-\frac{\pi}{12}$.
(Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt

31 of 43

5.6.1

Complete the following statement.

The domain of $f(x) = \sin^{-1} x$ is _____.

The domain of $f(x) = \sin^{-1} x$ is $[-1,1]$.
(Type your answer in interval notation.)

Score: 1 of 1 pt

32 of 43

Test Score: 92.2

5.6.3

Find the exact value of the expression.

$\cos^{-1} 0$

$\cos^{-1} 0 = \frac{\pi}{2}$
(Type your answer in radians. Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression.)

Score: 1 of 1 pt | 33 of 43 | **Test Score:** 92.25%, 39.67 of 43 p

5.6.19

Find the exact value of y or state that y is undefined.

$y = \tan^{-1} 1$

Select the correct choice and fill in any answer boxes in your choice below.

A. $y = \frac{\pi}{4}$

(Simplify your answer. Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression. Type your answer in radians.)

B. The answer is undefined.

Score: 1 of 1 pt | 34 of 43 | **Test Score:**

5.6.21

Find the exact value, in radians, of y or state that y is undefined.

$y = \cot^{-1}(1)$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $y = \frac{\pi}{4}$

(Simplify your answer. Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression.)

B. The answer is undefined.

Score: 1 of 1 pt | 35 of 43

5.6.23

Find the exact value of y, or state that y is undefined.

$y = \sin^{-1}(4)$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $\sin^{-1}(4) =$ ☐

(Simplify your answer, including any radicals. Use integers or fractions for any numbers in the expression.

B. The answer is undefined.

Score: 1 of 1 pt | 36 of 43 | **Test Score:**

5.6.25

Find the exact value, in radians, of y or state that y is undefined.

$y = \cot^{-1}(\sqrt{3})$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $\cot^{-1}(\sqrt{3}) = \frac{\pi}{6}$

(Simplify your answer. Type an exact answer, using pi as needed. Use integers or fractions for any numbers in the expression.)

B. The answer is undefined.

Score: 1 of 1 pt | 37 of 43 | **Test Score:** 92.25%, 39.67 of 43 p

5.6.27

Find the exact value of y or state that y is undefined.

$y = \cos\left(\cos^{-1}\frac{4}{9}\right)$

Select the correct choice below and fill in any answer boxes in your choice.

A. $y = \frac{4}{9}$

(Simplify your answer. Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression. Type your answer in radians.)

B. The answer is undefined.

Score: 0 of 1 pt | 38 of 43 | **Test Score:** 92.

5.6.29

Find the exact value, in radians, of y or state that y is undefined.

$y = \tan^{-1}\left[\tan\left(-\frac{\pi}{3}\right)\right]$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

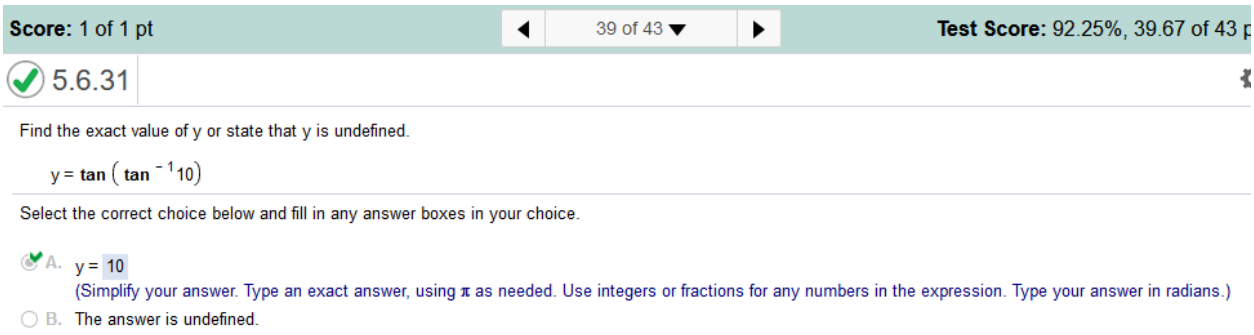
A. $y = -\frac{\pi}{3}$

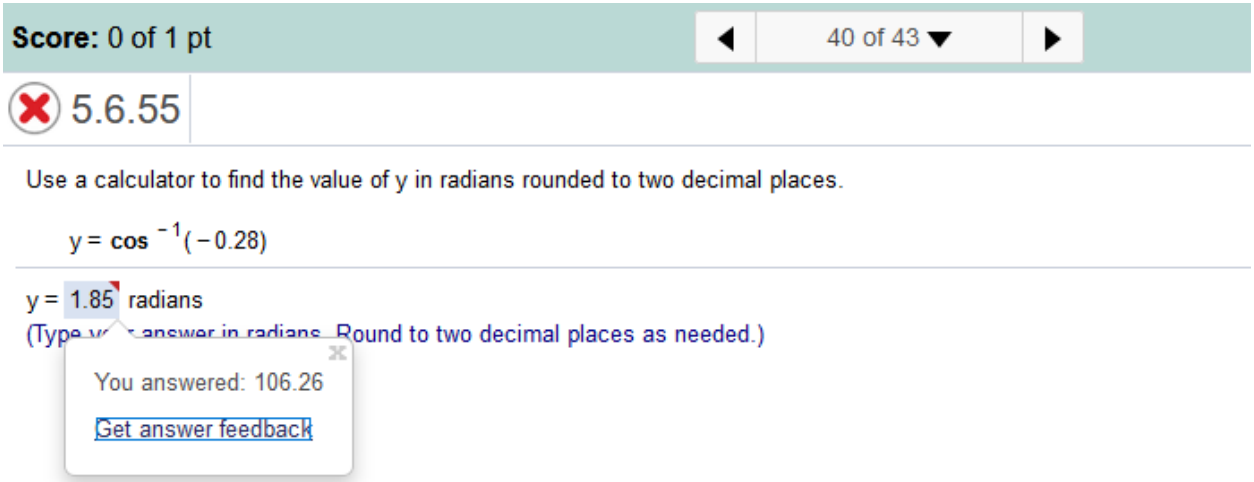
(Simplify your answer. Type an exact answer, using pi as needed. Use integers or fractions for any numbers in the expression.)

B. The

You answered: $\frac{2\pi}{3}$

this is incorrect because we just wanted the distance from the x axis. I messed up. I know why what I put is wrong.





Read the question. This did not want it converted to degress, it wanted it in radians

Score: 1 of 1 pt

41 of 43

5.6.57

Use a calculator to find the approximate value, in degrees, of the expression.

$\sec^{-1}(-3.36)$

$\sec^{-1}(-3.36) =$ 107.31 °

(Round to the nearest hundredth as needed.)

Score: 1 of 1 pt

42 of 43

5.6.59

Use a calculator to find the value of y in degrees rounded to two decimal places.

$y = \tan^{-1} 18$

y = 86.82 °

(Round to two decimal places as needed.)

Score: 1 of 1 pt

43 of 43

Test Score: 92.25%, 39.67 of 43

5.6.63

Use a sketch to find the exact value of y.

$y = \cos\left(\sin^{-1}\frac{3}{8}\right)$

Select the correct choice and fill in any answer boxes in your choice below.

A. $y = \frac{\sqrt{55}}{8}$

(Simplify your answer, including any radicals. Type an exact answer, using radicals as needed. Type an exact answer, using π as needed. Use integers or fractions for any numbers in the expression.)

B. The answer is undefined.