MATH-1330-003 Quiz Scores Spring 2010

Each quiz is worth 9 points.

Quiz 31 April 28

Find the exact value of $\tan\left[\cos^{-1}\left(-\frac{\sqrt{11}}{6}\right)\right]$.

Scores: 9, 6, 6, 5, 5, 5, 5, 5, 3, 2, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 30 April 26

Find the exact value of the following.

1. $\cos\left(Arc\cos\frac{5\pi}{6}\right)$ (4 pts.) 2. $\sin^{-1}\left(\sin\frac{4\pi}{3}\right)$ (5 pts.)

Scores: 7, 4, 3, 2, 2, 2, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 29 April 23

Find the exact value of :

1. $\tan^{-1}(-\sqrt{3})$ 2. $Arc\tan 0$ 3. $\tan^{-1}1$

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 7, 6, 6, 6, 4, 4, 4, 3, 3, 3, 1

Quiz 28 April 21

Find the exact value of:

1. $Arc\cos\left(-\frac{1}{2}\right)$ 2. $\cos^{-1}0$ 3. $Arc\cos\frac{\sqrt{3}}{2}$

Scores: 9, 9, 9, 9, 9, 7, 6, 6, 6, 6, 6, 6, 6, 3, 3, 3, 3, 3, 3, 3, 0, 0, 0, 0

Quiz 27 April 19

Find the exact value of :

1. $\sin^{-1}\frac{1}{2}$ 2. $Arc\sin\left(-\frac{\sqrt{2}}{2}\right)$ 3. $\sin^{-1}(-1)$

Scores: 9, 9, 9, 9, 9, 9, 7, 6, 6, 6, 6, 6, 6, 4, 3, 3, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 26 April 16

Sketch two cycles of the graph of $y = \tan 8x$. Label the numbers on the *x*- and *y*-axes as needed.

Scores: 9, 9, 8, 8, 8, 7, 7, 7, 6, 6, 5, 5, 5, 4, 4, 1, 1, 0, 0, 0

Quiz 25 April 14

Sketch two cycles of the graph of $y = -8\sec\frac{\pi x}{6}$. Label the numbers on the *x*- and *y*-axes as needed.

Only label where each cycle begins and ends. Do not label the numbers in between.

Scores: 9, 9, 8, 8, 8, 7, 6, 6, 5, 5, 5, 4, 3, 2, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0

Quiz 24 April 9

Sketch two cycles of the graph of $y = \sqrt{5}\sin\left(-\frac{4x}{7}\right)$. Label the numbers on the *x*- and *y*-axes. Give the amplitude and period.

Scores: 9, 9, 9, 9, 9, 8, 7, 6, 6, 5, 4, 4, 4, 3, 3, 2, 0, 0, 0, 0, 0, 0

Quiz 23 April 7

Sketch two cycles of the graph of $y = \frac{2}{3}\cos 5x$. Label the numbers on the *x*- and *y*-axes.

Scores: 9, 9, 9, 9, 9, 9, 9, 8, 8, 8, 7, 7, 7, 6, 6, 6, 6, 6, 5, 5, 4, 3, 2, 1, 0, 0

Quiz 22 April 5

Approximate the following to four decimal places. (3 pts. each)

1. $\csc \frac{12\pi}{17}$ 2. $\tan(-580°)$ 3. $\cos \frac{193\pi}{9}$

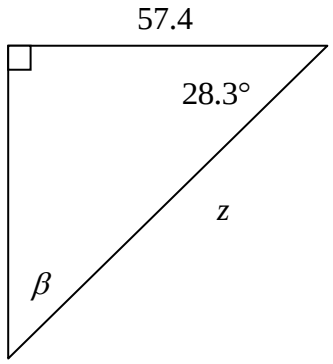
Scores: 9, 9, 8, 7, 6, 6, 6, 5, 4, 3, 3, 3, 3, 3, 2, 2, 2, 2, 2, 1, 1, 1, 1, 1, 0, 0

Quiz 21 April 2

The angle of depression from the top of a building to an object on the ground below is $74°$. If the object is 45 yards from the base of the building, then find the height of the building. Round your answer to the nearest hundredth.

Scores: 9, 9, 9, 9, 9, 8, 8, 8, 8, 6, 6, 6, 6, 6, 6, 5, 5, 5, 0, 0, 0, 0, 0

Quiz 20 Mar 31



Find β. (3pts.)

Find *z*. Round your answer to the nearest tenth. (6 pts.)

Scores: 9, 9, 9, 8, 8, 8, 8, 8, 7, 7, 6, 6, 6, 5, 5, 5, 5, 4, 4, 2, 2, 2, 0, 0, 0

Bonus Quiz Mar 29

From a point P on level ground, the angle of elevation to the top of a mountain is $32°$. From a point 40 feet closer to the mountain and on the same line with P and the base of the mountain, the angle of elevation to the top of the mountain is $67°$. Find the height of the mountain.

Scores: 8, 7, 3, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 19 Mar 26

If $\csc\theta = -\frac{8}{\sqrt{11}}$ and $\tan\theta < 0$, then use a right triangle to find the exact value of $\cos\theta$ and $\cot\theta$.

Scores: 9, 9, 9, 9, 9, 8, 7, 7, 7, 7, 6, 6, 6, 6, 6, 6, 5, 5, 4, 4, 2, 2, 0, 0, 0, 0

Quiz 18 Mar 24

If $\tan\beta = -\frac{\sqrt{3}}{5}$ and β is in the II quadrant, then use a right triangle to find the exact value of $\sec\beta$ and $\sin\beta$.

Scores: 9, 9, 8, 8, 7, 7, 7, 7, 7, 7, 7, 7, 7, 6, 5, 5, 5, 5, 4, 4, 3, 3, 1, 1, 0, 0, 0

Quiz 17 Mar 22

Determine the quadrant that the following angles are in.

1. $\sin\alpha < 0$ and $\sec\alpha > 0$ (4 pts.)
2. $\cot\theta > 0$ and $\cos\theta < 0$ (5 pts.)

Scores: 9, 9, 9, 9, 9, 9, 9, 8, 6, 6, 5, 5, 5, 5, 4, 4, 4, 3, 2, 2, 2, 0, 0, 0, 0, 0, 0, 0

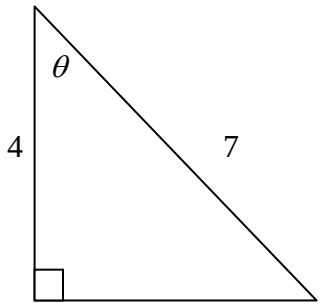
Quiz 16 Mar 19

If $\cos\alpha = \frac{\sqrt{15}}{8}$ and α is an acute angle, then use a right triangle to find the exact value of $\sin\alpha$ and $\cot\alpha$.

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 8, 8, 7, 7, 7, 7, 6, 6, 6, 4, 3, 3, 2, 0

Quiz 15 Mar 17

Given:



Find the exact value of $\csc\theta$ and $\tan\theta$.

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 8, 8, 8, 7, 7, 6, 6, 4, 4, 3, 1, 0

Quiz 14 Mar 15

The terminal side of the angle β is in the III quadrant and lies on the line $10x - 6y = 0$. Find the exact value of 1. $\sec\beta$ 2. $\tan\beta$

Scores: 9, 9, 9, 9, 9, 8, 8, 7, 7, 6, 5, 3, 3, 3, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 13 Mar 5

If the point $(-9, \sqrt{6})$ is on the terminal side of the angle α, then find the exact value of

1. $\cot\alpha$ (4 pts.) 2. $\sin\alpha$ (5 pts.)

Scores: 9, 9, 8, 8, 8, 8, 8, 8, 6, 6, 6, 6, 6, 6, 6, 5, 5, 5, 4, 4, 2, 2, 0

Quiz 12 Mar 3

Find the exact value of the following:

1. $\cos 630°$ (4 pts.) 2. $\tan\left(-\frac{51\pi}{4}\right)$ (5 pts.)

Scores: 9, 9, 8, 8, 8, 8, 8, 7, 7, 7, 7, 7, 6, 6, 6, 6, 6, 6, 4, 4, 4, 3, 3, 3, 3, 3

Quiz 11 Feb 26

Find the exact value of the following:

1. $\sin\frac{143\pi}{6}$ (5 pts.) 2. $\csc(-930°)$ (4 pts.)

Scores: 9, 9, 8, 8, 7, 7, 6, 6, 4, 4, 3, 3, 3, 2, 2, 2, 2, 2, 1, 1, 1, 1, 1, 1, 1, 0, 0, 0, 0

Quiz 10 Feb 24

1. Find the angle between 0 and 2π that is coterminal with the angle $\frac{101\pi}{6}$.

2. Find the angle between -2π and 0 that is coterminal with the angle $-\frac{112\pi}{3}$.

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 9, 8, 8, 8, 7, 6, 6, 6, 6, 6, 5, 5, 5, 4, 3, 1, 0, 0, 0, 0

Quiz 9 Feb 19

Find the exact value of the following: (3 pts. each)

1. $\sin\frac{5\pi}{4}$ 2. $\cot\left(-\frac{2\pi}{3}\right)$ 3. $\sec 150°$

Scores: 9, 9, 9, 8, 8, 8, 7, 7, 5, 5, 5, 5, 5, 4, 4, 3, 3, 3, 3, 2, 1, 1, 1, 0, 0, 0, 0, 0, 0, 0

Quiz 8 Feb 17

Find the exact value of the following: (3 pts. each)

1. $\cos(-300°)$ 2. $\tan\frac{5\pi}{6}$ 3. $\csc\frac{5\pi}{3}$

Scores: 9, 8, 8, 8, 7, 7, 6, 6, 5, 5, 5, 5, 4, 3, 3, 2, 2, 2, 2, 1, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 7 Feb 15

Find the reference angle for the following angles.

1. $\alpha = -230°$ (3 pts.) 2. $\beta = \frac{29\pi}{17}$ (4 pts.) 3. $\theta = -\frac{3\pi}{2}$ (2 pts.)

Scores: 9, 9, 9, 8, 7, 6, 6, 6, 5, 5, 5, 5, 3, 3, 2, 2, 2, 2, 2, 2, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 6 Feb 8

Find the exact value of the following: (3 pts. each)

1. $\tan\frac{\pi}{3}$ 2. $\sec 30°$ 3. $\sin\frac{\pi}{6}$

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 8, 8, 8, 8, 8, 6, 6, 6, 6, 5, 5, 5, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 5 Feb 5

Find the exact value of the following: (3 pts. each)

1. $\csc 180°$ 2. $\cos 2\pi$ 3. $\cot\frac{\pi}{2}$

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 8, 6, 6, 6, 6, 6, 4, 4, 3, 3, 3, 3, 3, 2, 1, 0, 0, 0, 0, 0, 0

Quiz 4 Feb 1

Find the exact value of the following: (3 pts. each)

1. $\tan\pi$ 2. $\sec 270°$ 3. $\sin\left(-\frac{\pi}{2}\right)$

Scores: 9, 9, 9, 9, 9, 9, 9, 9, 7, 7, 7, 7, 6, 6, 6, 4, 4, 4, 3, 3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 3 Jan 29

Find the length of the arc which is intercepted by a central angle of $126°$ on a circle of radius 12 meters.

Scores: 9, 9, 8, 8, 7, 7, 6, 6, 6, 6, 6, 5, 4, 4, 4, 4, 4, 2, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Quiz 2 Jan 27

Convert the following angles to radians if given in degrees or to degrees if given in radians: (3 pts. each)

1. $\alpha = 105°$ 2. $\beta = \frac{7\pi}{15}$ 3. $\theta = 4$

Scores: 8, 8, 8, 7, 7, 6, 6, 6, 5, 5, 5, 5, 5, 5, 5, 5, 4, 4, 4, 4, 4, 3, 2, 1, 0, 0, 0, 0, 0

Quiz 1 Jan 25

Determine the location of the following angles: (3 pts. each)

1. $\theta = \frac{27\pi}{19}$ 2. $\alpha = -280°$ 3. $\beta = \frac{3\pi}{2}$

Scores: 9, 9, 9, 9, 9, 9, 9, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 3, 3, 3, 3, 3, 3, 3, 0, 0, 0, 0, 0, 0, 0, 0