

Pre-Calculus Lesson 5.1

Lesson 182 | Precalculus | Unit circle and exact values • Radians, reference and coterminal angles

https://www.youtube.com/watch?v=qbTGip_pwZ0

Related review: exact coverage needs teacher confirmation.

Name: _____ Date: _____ Show your reasoning.

01

Find exact $\sin(-1020^\circ)$ and $\cos(-1020^\circ)$ using the unit circle. Give the coterminal angle in $[0^\circ, 360^\circ)$.

02

For angle -1950° , find the radian measure, the coterminal angle in $[0^\circ, 360^\circ)$, and its reference angle (use 0° or 90° for axis angles).

03

Find exact $\sin(3600^\circ)$ and $\cos(3600^\circ)$ using the unit circle. Give the coterminal angle in $[0^\circ, 360^\circ)$.

Pre-Calculus Lesson 5.1

Lesson 182 | Precalculus | Unit circle and exact values • Radians, reference and coterminal angles

https://www.youtube.com/watch?v=qbTGip_pwZ0

Related review: exact coverage needs teacher confirmation.

Name: _____ Date: _____ Show your reasoning.

04

For angle -3120° , find the radian measure, the coterminal angle in $[0^\circ, 360^\circ)$, and its reference angle (use 0° or 90° for axis angles).

05

Find exact $\sin(-1140^\circ)$ and $\cos(-1140^\circ)$ using the unit circle. Give the coterminal angle in $[0^\circ, 360^\circ)$.

06

For angle 780° , find the radian measure, the coterminal angle in $[0^\circ, 360^\circ)$, and its reference angle (use 0° or 90° for axis angles).

Pre-Calculus Lesson 5.1

Lesson 182 | Precalculus | Unit circle and exact values • Radians, reference and coterminal angles

https://www.youtube.com/watch?v=qbTGip_pwZ0

Related review: exact coverage needs teacher confirmation.

01

Find exact $\sin(-1020^\circ)$ and $\cos(-1020^\circ)$ using the unit circle. Give the coterminal angle in $[0^\circ, 360^\circ)$.

Coterminal angle 60° . Coordinates $(\cos \theta, \sin \theta) = (1/2, \sqrt{3}/2)$; the first is cosine and the second is sine.

02

For angle -1950° , find the radian measure, the coterminal angle in $[0^\circ, 360^\circ)$, and its reference angle (use 0° or 90° for axis angles).

Radians = $-65/6\pi$. Coterminal angle 210° . Reference angle 30° .

03

Find exact $\sin(3600^\circ)$ and $\cos(3600^\circ)$ using the unit circle. Give the coterminal angle in $[0^\circ, 360^\circ)$.

Coterminal angle 0° . Coordinates $(\cos \theta, \sin \theta) = (1, 0)$; the first is cosine and the second is sine.

Pre-Calculus Lesson 5.1

Lesson 182 | Precalculus | Unit circle and exact values • Radians, reference and coterminal angles

https://www.youtube.com/watch?v=qbTGip_pwZ0

Related review: exact coverage needs teacher confirmation.

04

For angle -3120° , find the radian measure, the coterminal angle in $[0^\circ, 360^\circ)$, and its reference angle (use 0° or 90° for axis angles).

Radians = $-52/3\pi$. Coterminal angle 120° . Reference angle 60° .

05

Find exact $\sin(-1140^\circ)$ and $\cos(-1140^\circ)$ using the unit circle. Give the coterminal angle in $[0^\circ, 360^\circ)$.

Coterminal angle 300° . Coordinates $(\cos \theta, \sin \theta) = (1/2, -\sqrt{3}/2)$; the first is cosine and the second is sine.

06

For angle 780° , find the radian measure, the coterminal angle in $[0^\circ, 360^\circ)$, and its reference angle (use 0° or 90° for axis angles).

Radians = $13/3\pi$. Coterminal angle 60° . Reference angle 60° .