

QUIZZZ

NAME : _____

CLASS : _____

DATE : _____

Exact Values
10 Questions

1. Based on your unit circle $\sin(30^\circ) =$

A $\sqrt{2}/2$

C 1

B $1/2$

D $\sqrt{3}/2$

y coordinate of unit circle

($\sqrt{3}/2, 1/2$)

2. Based on your unit circle $\cos(30^\circ) =$

A $(\sqrt{2})/2$

C 1

B $(\sqrt{3})/2$

D $1/2$

x coordinate of unit circle

3.

$\sin \frac{\pi}{6}$

A) $\frac{1}{\sqrt{2}}$ B) $\frac{1}{2}$
 C) $\frac{1}{\sqrt{3}}$ D) No Solution

$\sin \frac{\pi}{6} = \sin 30^\circ = \frac{1}{2}$

A B

B A

C D

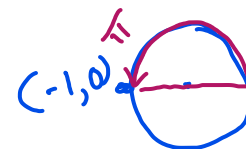
D C

4.

$\cos \pi$

A) -1 B) 1
 C) 0 D) Undefined

$\cos \pi$



A B

B A

C D

D C

5.

$\tan \frac{\pi}{4}$

A) $\frac{1}{\sqrt{2}}$ B) 1
 C) -1 D) No Solution



$\tan \frac{\pi}{4} = \frac{y}{x}$
 $= \frac{\sqrt{2}/2}{\sqrt{2}/2}$
 $= 1$

A A

B B

C C

D D

?

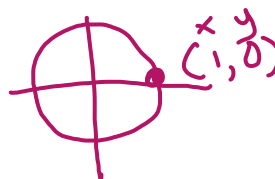
6. Based on your unit circle $\cos(0^\circ) =$

A 0

B -1

C 1/2

D 1



7. Based on your unit circle $\cos(90^\circ) =$

A -1

B 1/2

C 1

D 0



8. Based on your unit circle $\sin(90^\circ) =$

A 0

B 1/2

C 1

D -1

9. For what angles are sine and cosine the same?

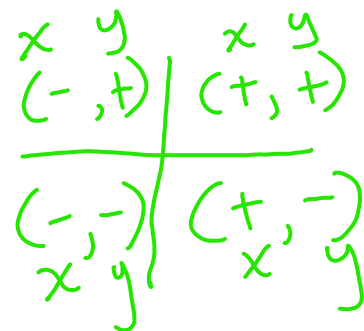
A 45° and 225°

Quadrant 1: both positive
Quadrant 3: both negative

C 45° and 315°

B 0°

D 45° and 135°



10. What is x if $\sin(x) = 0.5$?

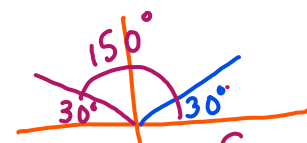
A -30° or 30°

$\sin 30^\circ = \frac{1}{2}$
 $\sin 150^\circ = \frac{1}{2}$

B 30° or 150°

C 150°

D 30°



Same reference angle. Sine is positive in 1st and 2nd quadrant

11. $\csc\left(\frac{\pi}{6}\right) =$

$\sin \frac{\pi}{6} = \frac{1}{2}$

csc is reciprocal of sine $\Rightarrow \frac{1}{\frac{1}{2}} = 2$

Answer Key

1. b

2. b

3. a

4. b

5. b

6. d

7. d

8. c

9. a

10. b