

Special Angles #3

Name: Key

Find the exact value of each. DO NOT USE A CALCULATOR!

1) $\sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}$

2) $\cos 240^\circ = -\frac{1}{2}$
 $4 \cdot 60 = \frac{4\pi}{3}$

3) $\tan 180^\circ = 0$

4) $\cos \frac{13\pi}{4} = -\frac{\sqrt{2}}{2}$

$(-1, 0)$

5) $\cot \frac{5\pi}{6} = -\sqrt{3}$

6) $\sec 60^\circ = 2$
 $\frac{\pi}{3}$
 $\frac{1}{\cos \pi/3} = 2$

7) $\csc 300^\circ = -\frac{2\sqrt{3}}{3}$
 $60 \cdot 5 = 3\pi/3$
 $\frac{1}{\sin} = \frac{1}{\sqrt{3}/2}$

8) $\tan \frac{8\pi}{3} = -\sqrt{3}$
 $\frac{2\pi}{3}$
 Q2

9) $\cos 330^\circ - \sin 45^\circ =$

10) $\cot \frac{5\pi}{3} + \sin -\frac{\pi}{3} =$

$\frac{11\pi}{6}$
 $\frac{\sqrt{3}}{2} - \frac{\sqrt{2}}{2}$

$-\frac{\sqrt{3}}{3} - \frac{\sqrt{3}}{2}$

11) $6\sin 120^\circ - 3\tan 45^\circ =$

12) $2\sin \frac{3\pi}{4} \sin \frac{5\pi}{6} = \frac{\sqrt{2}}{2}$

$6 \cdot \frac{\sqrt{3}}{2} = 3\sqrt{3}$
 $-3 \cdot 1$
 $3\sqrt{3} - 3$

$\frac{2\sqrt{2}}{2} \cdot \frac{1}{2}$
 $\sqrt{2} \cdot \frac{1}{2}$

Special Angles #3

Name: _____

Find the exact value of each. DO NOT USE A CALCULATOR!


1) $\sin 120^\circ = \frac{\sqrt{3}}{2}$



2) $\tan 210^\circ = \frac{\sqrt{3}}{3}$

30.7 $\pi/6$

3) $\cos \frac{7\pi}{6} = \frac{-\sqrt{3}}{2}$



4) $\sec \frac{3\pi}{2} = \text{undef}$

$\cos \frac{3\pi}{2} = 0 = \frac{1}{0}$


5) $\cot \frac{7\pi}{4} = -\sqrt{2}$

6) $\cot 2\pi = \text{undef}$

$\frac{x}{y} = \frac{1}{0}$

7) $\csc 315^\circ = -\sqrt{2}$

$\frac{\pi}{4}$



8) $\sec -150^\circ = -\frac{2\sqrt{3}}{3}$

$\cos \pi/6$

$1 \div \frac{\sqrt{3}}{2}$

9) $\cos 150^\circ \sin 225^\circ = \frac{\sqrt{6}}{4}$



Sin

10) $3 \tan \frac{11\pi}{6} + \sec \frac{5\pi}{3} = -\sqrt{3} + 2$

$3(-\frac{\sqrt{3}}{3} + 2)$

$\frac{\pi}{4} \cos \pi/3 = \frac{1}{2}$

$\frac{5\pi}{6} \cdot \frac{-\sqrt{3}}{2} \cdot \frac{-\sqrt{2}}{2} = \frac{\sqrt{6}}{4}$

11) $2 \sin \frac{3\pi}{4} \sin \frac{5\pi}{6} = \frac{\sqrt{2}}{2}$

12) $6 \sin 120^\circ - 3 \tan 45^\circ = 3\sqrt{3} - 3$

$6 \cdot \frac{\sqrt{3}}{2} - 3$

$3\sqrt{3} - 3$

$2 \cdot \frac{\sqrt{2}}{2} \cdot \frac{1}{2}$

$\sqrt{2} \cdot \frac{1}{2}$