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) $\cos 240°=$ $-\frac{1}{2}$

$4\cdot 60 = \frac{4\pi}{3}$

3) $\tan 180°$ 0

$(-1,0)$

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

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

6) $\sec 60°=$ 2

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

7) $\csc 300°=$ $-\frac{2\sqrt{3}}{3}$

$60\cdot 5 = 5\pi/3$

$\frac{1}{\sin} = \frac{1}{\sqrt{3}/2}$

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

$\frac{2\pi}{3}$ Q2

9) $\cos 330° - \sin 45°=$

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

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

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

11) $6\sin 120° - 3\tan 45°=$

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

$-3\cdot 1$

$3\sqrt{3}-3$

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

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

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

Special Angles #3 Name: _____

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

1) $\sin 120° =$ $\frac{\sqrt{3}}{2}$

2) $\tan 210° =$ $\frac{\sqrt{3}}{3}$

30·7 $7\pi/6$

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

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

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

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

6) $\cot 2\pi =$ undef

X / Y 1 / 0

7) $\csc 315° =$ $-\sqrt{2}$

$\frac{\pi}{4}$

Sin

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

$\cos \pi/6$

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

9) $\cos 150° \sin 225° =$ $\sqrt{6}/4$

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

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

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

$\cos \pi/3$

$= \frac{1}{2}$

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

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

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

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

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

$3\sqrt{3} - 3$