

Bellwork Hon Alg 2 Friday, May 12, 2017

Find the EXACT value of each using the Unit Circle.

1.  $\sin 1575^\circ$

2.  $\cos\left(-\frac{19\pi}{3}\right)$

3.  $\tan \frac{23\pi}{6}$

4.  $\sin(-27\pi)$

5.  $\cos \frac{15\pi}{2}$

6.  $\tan 18\pi$

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Find the EXACT value of each using the Unit Circle.

1.  $\sin 1575^\circ$

$= \sin(135^\circ)$

$= \frac{\sqrt{2}}{2}$

2.  $\cos\left(-\frac{19\pi}{3}\right)$

$= \cos\left(\frac{5\pi}{3}\right)$

$= \frac{1}{2}$

3.  $\tan \frac{23\pi}{6}$

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

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

4.  $\sin(-27\pi)$

$= \sin \pi$

$= 0$

5.  $\cos \frac{15\pi}{2}$

$= \cos\left(\frac{3\pi}{2}\right)$

$= 0$

6.  $\tan 18\pi$

$= \tan 0$

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

~~UNIT CIRCLE~~ ANSWERS