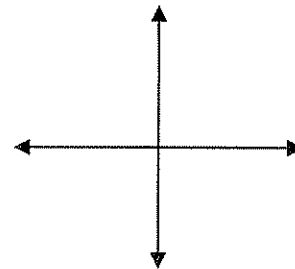


Use your unit circle to find the exact value for each.

1.  $\tan 420^\circ = \sqrt{3}$       2.  $\sec \frac{17\pi}{6} = \frac{-2\sqrt{3}}{3}$       3.  $\cot 540^\circ = 0$       4.  $\sec 405^\circ = \sqrt{2}$   
 5.  $\tan \frac{14\pi}{3} = -\sqrt{3}$       6.  $\sec 390^\circ = \frac{2\sqrt{3}}{3}$       7.  $\tan \frac{13\pi}{6} = \frac{\sqrt{3}}{3}$       8.  $\csc 4\frac{2}{3}\pi = \frac{2\sqrt{3}}{3}$   
 9.  $\sec 750^\circ = \frac{2\sqrt{3}}{3}$       10.  $\cot \frac{9\pi}{4} = 1$

RECALL: Signs of trig functions in each quadrant.

Name the quadrant in which angle  $\theta$  lies.



1.  $\sin \theta > 0, \cos \theta > 0$       I  
 2.  $\sin \theta > 0, \cot \theta < 0$       II  
 3.  $\tan \theta < 0, \csc \theta < 0$       IV  
 4.  $\sec \theta < 0, \cot \theta > 0$       III

Find the exact value for each.

1.  $\csc \frac{-\pi}{6} = -2$       2.  $\cot (-405^\circ) = -1$       3.  $\csc \left(\frac{-3\pi}{4}\right) = -\sqrt{2}$   
 4.  $\csc (-390^\circ) = 2$       5.  $\cot (-87^\circ) = 0$       6.  $\sec (-225^\circ) = -\sqrt{2}$   
 7.  $\tan (-720^\circ) = 0$       8.  $\cot (-90^\circ) = 0$       9.  $\csc \left(\frac{-11\pi}{6}\right) = 2$   
 10.  $\tan \left(\frac{-3\pi}{4}\right) = -1$