ACC Geometry Name Key ID: 1

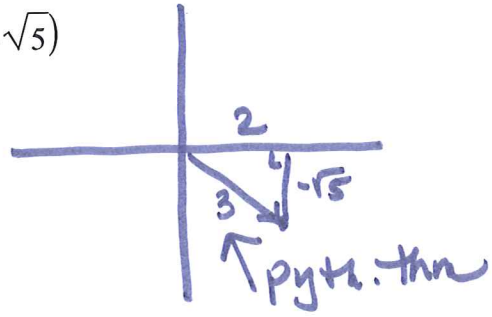
Exact Values Review

Date _____ Period ____

Use the given point on the terminal side of angle θ to find the value of the trigonometric function indicated.

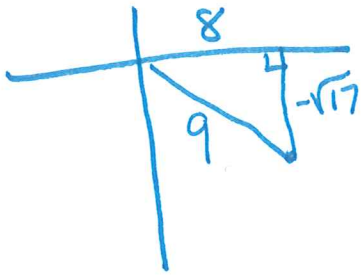
1) $\sec\theta; (2, -\sqrt{5})$

$\frac{3}{2}$



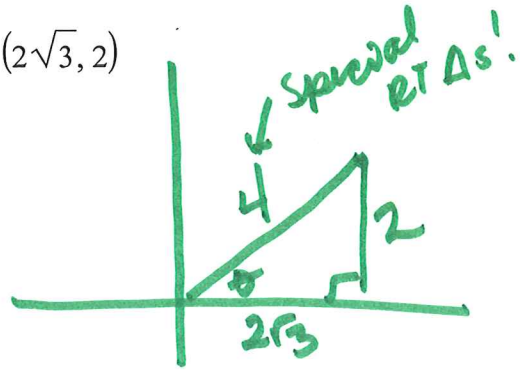
2) $\sec\theta; (8, -\sqrt{17})$

$\frac{9}{8}$



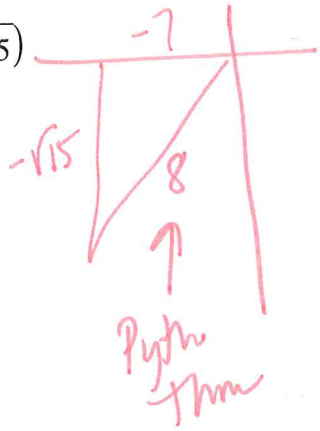
3) $\csc\theta; (2\sqrt{3}, 2)$

2



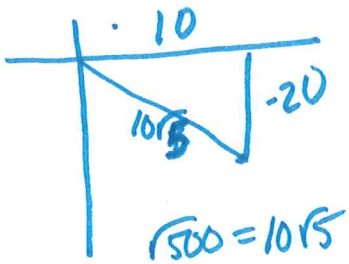
4) $\csc\theta; (-7, -\sqrt{15})$

$-\frac{8\sqrt{15}}{15}$



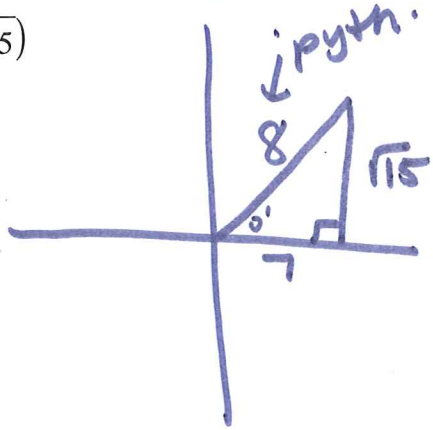
5) $\csc\theta; (10, -20)$

$-\frac{\sqrt{5}}{2}$



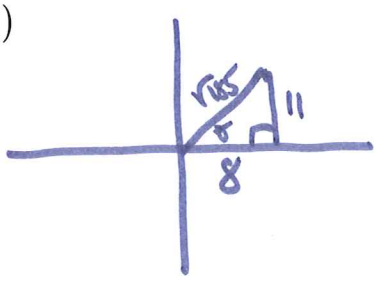
6) $\tan\theta; (7, \sqrt{15})$

$\frac{\sqrt{15}}{7}$



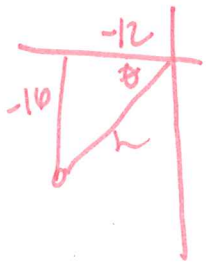
7) $\cot\theta; (8, 11)$

$\frac{8}{11}$



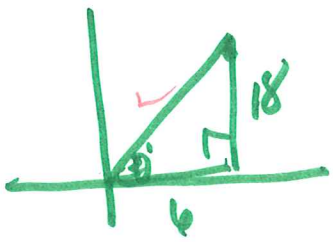
8) $\cot\theta; (-12, -16)$

$\frac{3}{4}$



9) $\tan\theta; (6, 18)$

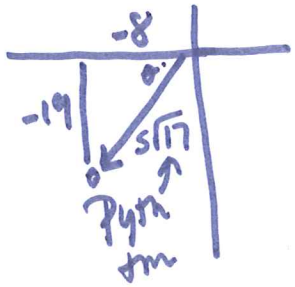
3



10) $\csc\theta; (-8, -19)$

$-\frac{5\sqrt{17}}{19}$

√425 = 5√17



√360

Find the exact value of each trigonometric function. Using the UNIT CIRCLE METHOD. Place the # on the completed unit circle and list your point on this page.

11) $\tan 945°$ 1 $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$

12) $\cot 0°$ $(1,0)$

Undefined

13) $\sec \frac{5\pi}{3}$ 2 $\left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

14) $\tan 90°$ $(0,1)$

Undefined

15) $\csc 450°$ 1 $(0,1)$

16) $\sin -\frac{5\pi}{6}$ $\left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

$-\frac{1}{2}$

17) $\csc 510°$ 2 $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

18) $\sec -570°$ $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

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

19) $\cot 750°$ $\sqrt{3}$ $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

$\sqrt{3}$

20) $\csc \frac{19\pi}{4}$ $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$

$\sqrt{2}$

21) $\sin -420°$ $\left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

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

22) $\sin -5\pi$ $(-1,0)$

0

23) $\csc -\frac{23\pi}{6}$ 2 $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

24) $\tan 750°$ $\left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

$\frac{\sqrt{3}}{3}$

25) $\sin \frac{23\pi}{6}$ $-\frac{1}{2}$ $\left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

26) $\csc -\frac{5\pi}{6}$ $\left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$

-2

27) $\csc -\frac{5\pi}{2}$ -1 $(0,1)$

28) $\tan \frac{3\pi}{2}$ $(0,-1)$

Undefined

29) $\sec \pi$ -1 $(-1,0)$

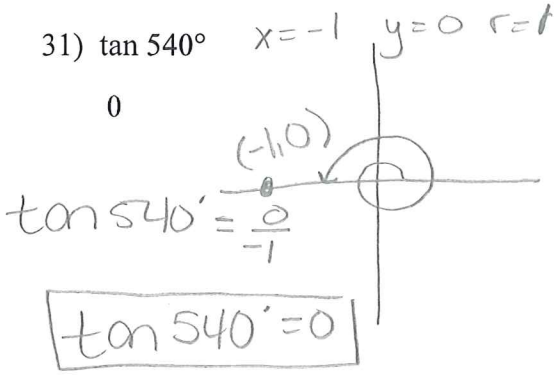
30) $\cot \frac{13\pi}{4}$ $\left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$

1

Find the exact value of each trigonometric function, using the TRIANGLE METHOD!

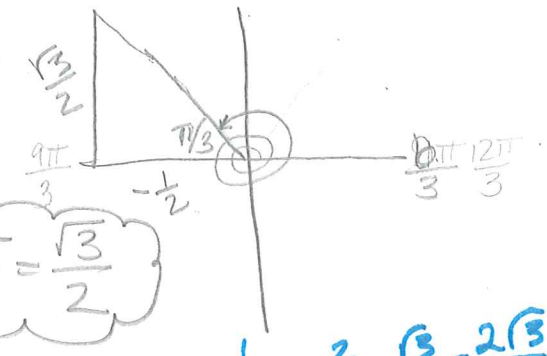
31) $\tan 540°$

0



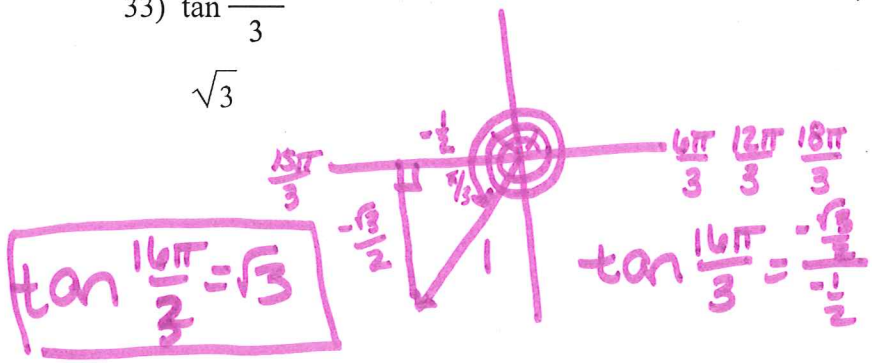
32) $\sin \frac{14\pi}{3}$

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



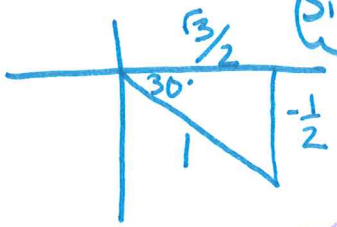
33) $\tan \frac{16\pi}{3}$

$\sqrt{3}$



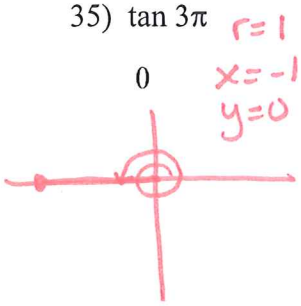
34) $\sec 330°$ recip. cos! $= \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$

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



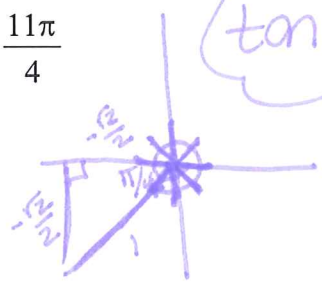
35) $\tan 3\pi$

0



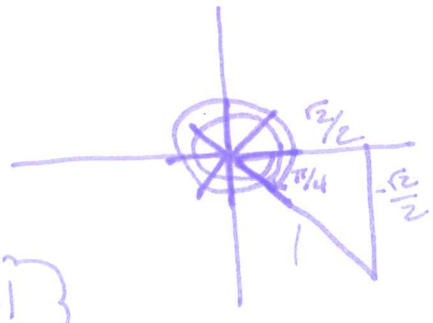
36) $\tan -\frac{11\pi}{4}$

1



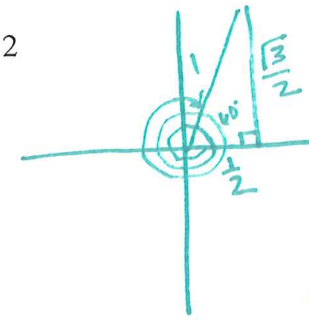
37) $\cot -\frac{17\pi}{4}$

-1



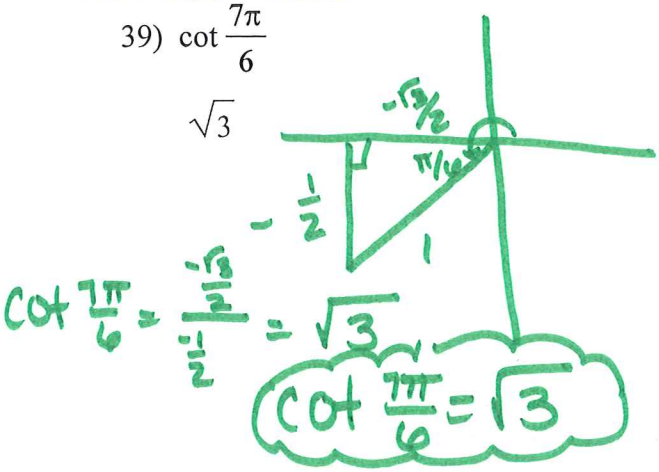
38) $\sec -1020°$

2



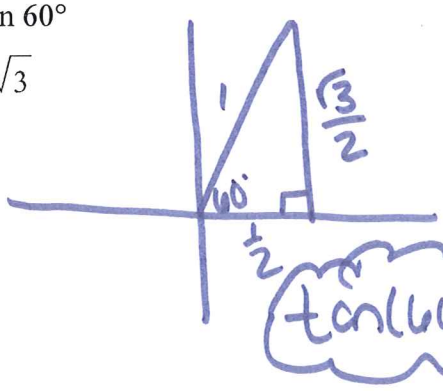
39) $\cot \frac{7\pi}{6}$

$\sqrt{3}$

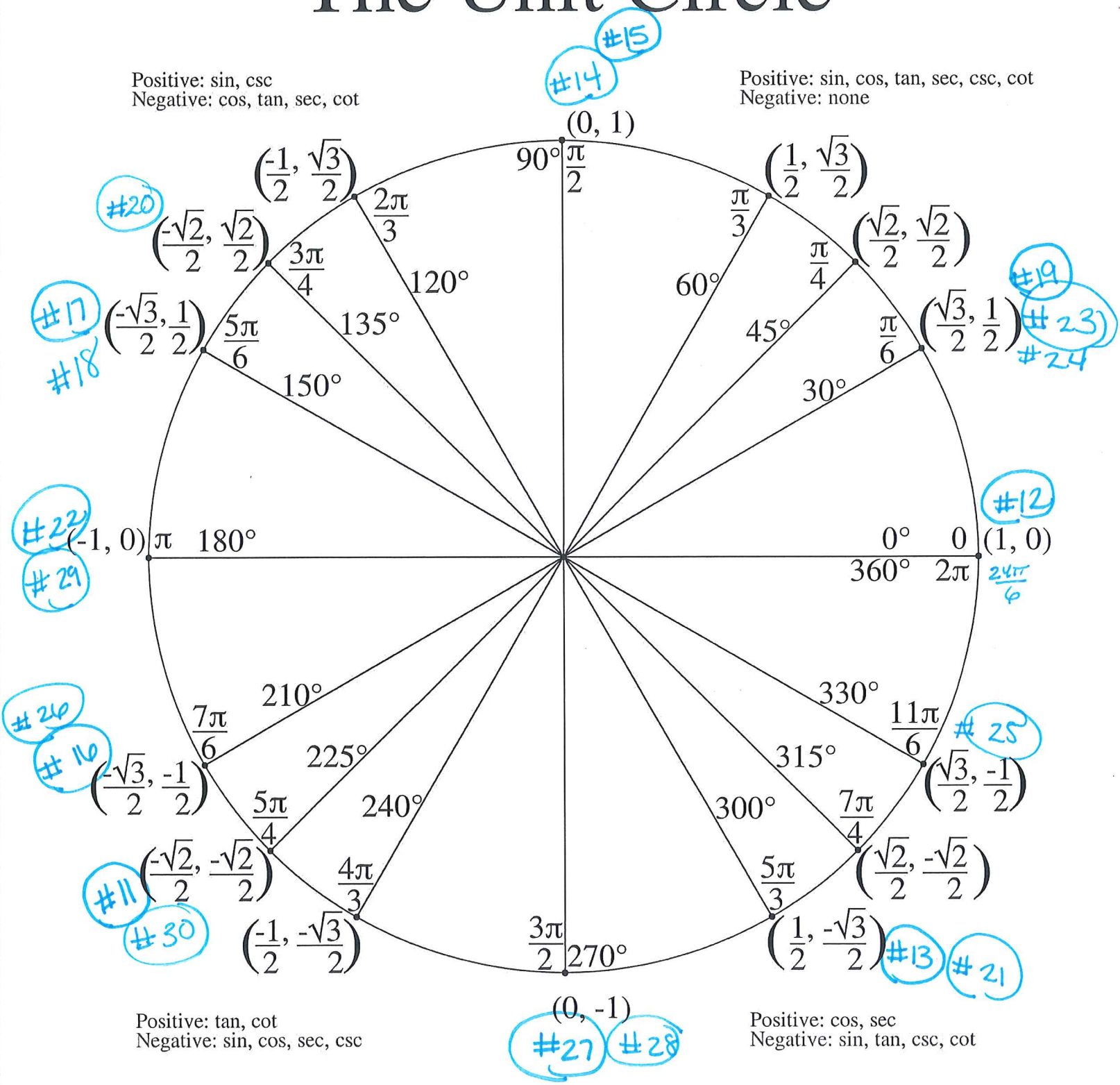


40) $\tan 60°$

$\sqrt{3}$



The Unit Circle



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