Evaluate using a calculator. Make sure your calculator is in the correct mode. Give answers to 3 decimal places and then draw the triangle that represents the situation.

A) $\sin 53^\circ$

B) $\cos\frac{2\pi}{5}$

C) $\tan 154^\circ$

D) $\cot\frac{\pi}{9}$

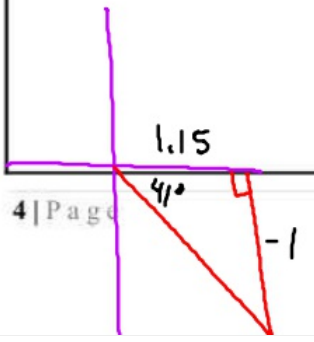
$\sin = \frac{opp}{hyp}$

$\cos = \frac{adj}{hyp}$

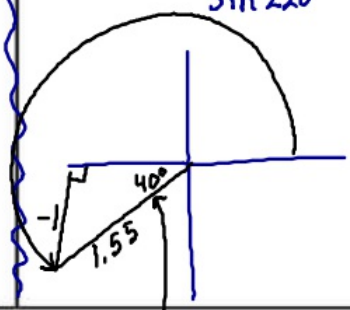
$1/\cos\left(\frac{8\pi}{5}\right)$

(6) $\cot 319^\circ = \frac{1}{\tan(319)}$

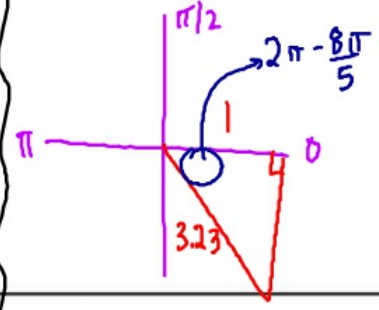
$\frac{adj}{opp} = \frac{-1.15}{1}$



E) $\csc(220^\circ) = \frac{1}{\sin 220^\circ} = \frac{-1.55}{1} = \frac{hyp}{opp}$



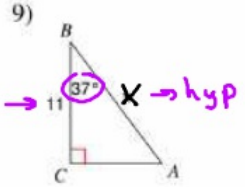
F) $\sec\left(\frac{8\pi}{5}\right) = \frac{hyp}{adj} = 3.23$



$\frac{8\pi}{5} = 5.02$

Solve the triangle for the variable shown.

9)



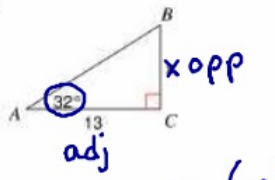
adj → 11 → 37° → X → hyp

$(x)\cos 37° = \frac{11}{x}(x)$

$\frac{x(\cos 37°)}{\cos 37°} = \frac{11}{\cos 37°}$

$x = \frac{11}{\cos 37°}$ $x = 13.77$

10)



adj

$(13)\tan 32° = \frac{x}{13}(13)$

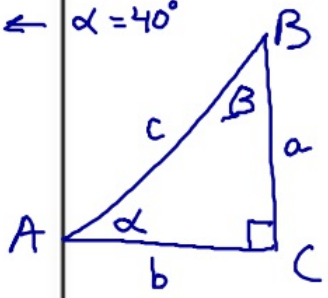
$13\tan 32° = x$

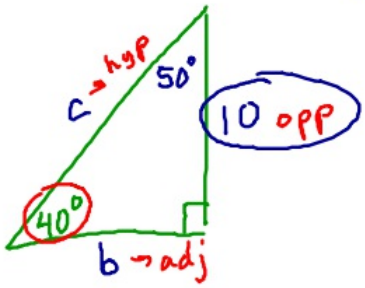
$8.133 = x$

Solve the triangle ABC for all of its unknown parts. Assume C is the right angle.

$\alpha = 40°$ $a = 10$

alpha ← $\alpha = 40°$





$B = 50°$
$c = 15.5$
$b = 11.91$

$\sin 40° = \frac{10}{c}$

$c = \frac{10}{\sin 40}$

$c = 15.55$

$\tan 40° = \frac{10}{b}$

$b = \frac{10}{\tan 40°}$