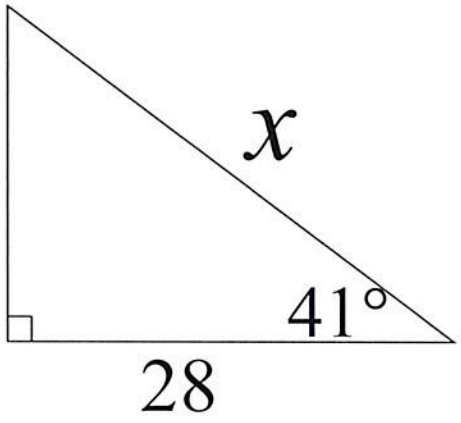
1. What is the value of x?



$\cos 41° = \frac{28}{x}$

$x \cos 41° = 28$

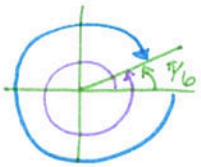
$x = \frac{28}{\cos 41°}$

$x = 37.100$

$\boxed{x = 37.1}$

2. Find a positive and negative angle coterminal to:

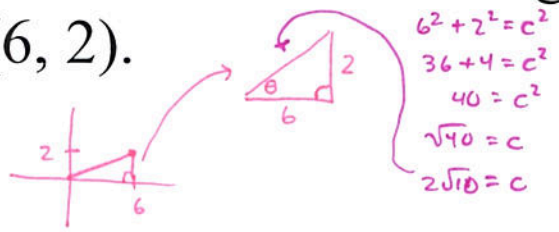
$$\frac{\pi}{6}$$



$\frac{\pi}{6} + 2\pi = \frac{\pi}{6} + \frac{12\pi}{6} = \boxed{\frac{13\pi}{6}}$

$\frac{\pi}{6} - 2\pi = \frac{\pi}{6} - \frac{12\pi}{6} = \boxed{-\frac{11\pi}{6}}$

3. Find the value of all six trig functions if the terminal side of an angle contains the point: (6, 2).



$6^2 + 2^2 = c^2$

$36 + 4 = c^2$

$40 = c^2$

$\sqrt{40} = c$

$2\sqrt{10} = c$

$\sin\theta = \frac{2}{2\sqrt{10}} = \boxed{\frac{1}{\sqrt{10}}}$

$\cos\theta = \frac{6}{2\sqrt{10}} = \boxed{\frac{3}{\sqrt{10}}}$

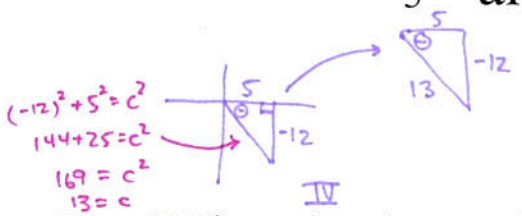
$\tan\theta = \frac{2}{6} = \boxed{\frac{1}{3}}$

$\csc\theta = \sqrt{10}$

$\sec\theta = \frac{\sqrt{10}}{3}$

$\cot\theta = 3$

4. Find the value of all six trig functions given $\tan\theta = \frac{-12}{5}$ and the angle is in Quadrant IV.

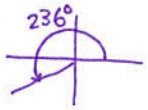


$\sin\theta = \frac{-12}{13}$ $\quad \csc\theta = -\frac{13}{12}$

$\cos\theta = \frac{5}{13}$ $\quad \sec\theta = \frac{13}{5}$

$\tan\theta = \frac{-12}{5}$ $\quad \cot\theta = \frac{-5}{12}$

5. What is the reference angle for: $236°$



$236 - 180 = \boxed{56°}$