13. If $\sin t = \dfrac{-5}{6}$ and the terminal side of the angle t lies in the third quadrant, then $\cos t = ?$
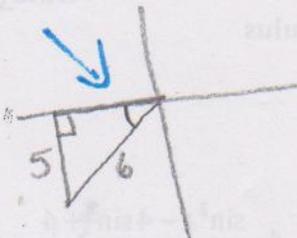
$\boxed{\cos t = -\dfrac{\sqrt{11}}{6}}$

$6^2 = 5^2 + x^2$

$36 = 25 + x^2$

$\dfrac{-25 \quad -25}{\sqrt{11}}$

14. If $\dfrac{\pi}{2} < t < \pi$ and $\sin t = \dfrac{5}{13}$, then $\cos t = ?$
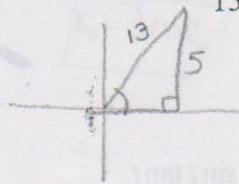
$\boxed{\cos t = -\dfrac{12}{13}}$ ✓

$169 = 25 + x^2$

$\dfrac{25}{144} = x^2$

15. If $\sin\left(-\dfrac{101\pi}{2}\right) = -1$, then $\sin\left(-\dfrac{103\pi}{2}\right) = ?$

$r = 1$

$y = -1$

$-\dfrac{101\pi}{2}$
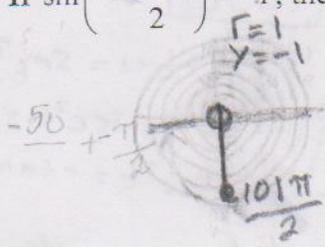
$\boxed{\sin -\dfrac{103\pi}{2} = 1}$ ✓

Express as a single real number... no decimals

16. $\cos\dfrac{3\pi}{4}\sin\dfrac{5\pi}{6} - \sin\dfrac{3\pi}{4}\cos\dfrac{5\pi}{6}$

$\left(-\dfrac{\sqrt{2}}{2} \cdot \dfrac{1}{2}\right) - \left(\dfrac{\sqrt{2}}{2} \cdot -\dfrac{\sqrt{3}}{2}\right)$

$\left(-\dfrac{\sqrt{2}}{4}\right) + \left(+\dfrac{\sqrt{6}}{4}\right)$

$\boxed{\dfrac{-\sqrt{2} + \sqrt{6}}{4}}$

17. $\sin\dfrac{\pi}{2} + \sin 0 + \cos 0$

$\boxed{2}$