

(1)[5 points] Find the exact value (if defined) of $\cos(7\pi/6)$ using the unit circle.

(2)[5 points] Find the exact value (if defined) of $\cot(3\pi/2)$ using the unit circle.

(3)[5 points] Sketch the graph of $y = -\frac{1}{2} \sin\left(x + \frac{\pi}{4}\right)$. State the amplitude, period and phase-shift of the function.