

PP Phasors 001

Unlimited Attempts.

$$v_1(t) = -4 \cdot \cos\left(10t + \frac{\pi}{4}\right) \text{ V}$$

$$v_2(t) = 3 \cdot \sin\left(10t + \frac{\pi}{3}\right) \text{ V}$$

Express as phasors

$$\mathbf{V}_1 = A_1 \cdot e^{jB_1} \quad \text{with} \quad 0 \leq A_1 \quad \text{and} \quad -180^\circ \leq B_1 \leq 180^\circ$$

$$\mathbf{V}_2 = A_2 \cdot e^{jB_2} \quad \text{with} \quad 0 \leq A_2 \quad \text{and} \quad -180^\circ \leq B_2 \leq 180^\circ$$

Given Variables:

...

Calculate the following:

A1 (V) :

4



B1 (degrees) :

-135



A2 (V) :

3



B2 (degrees) :

-30



Hint: Convert sin() to cos() first