

Phasors 002

Problem has been graded.

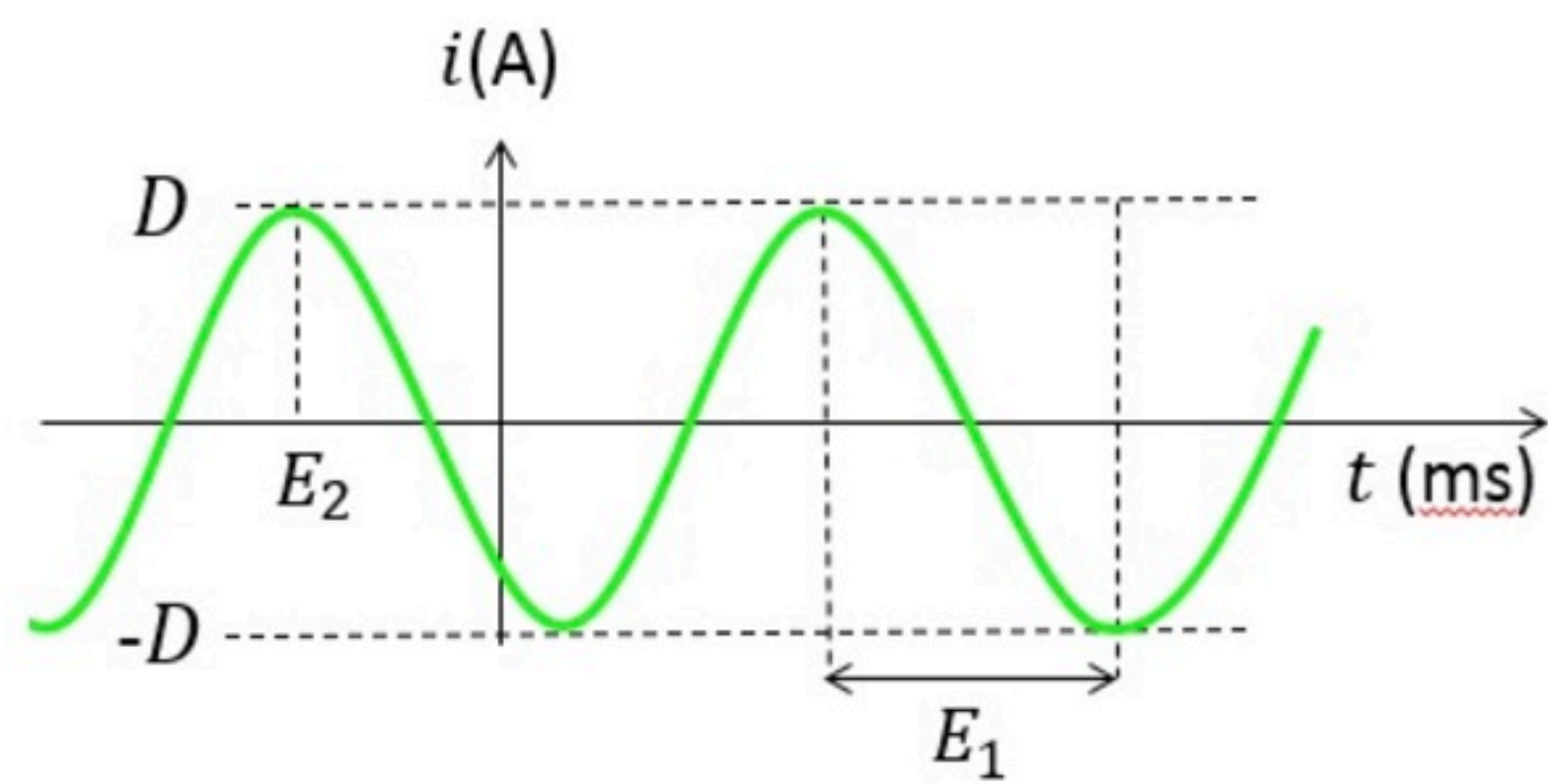
Express the current as a time waveform

$$i(t) = A_1 \cdot \cos(2\pi f_1 \cdot t + B_1)$$

with $0 \leq A_1$ and $-180^\circ \leq B_1 \leq 180^\circ$

and as a phasor

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



Given Variables:

- D : 5 A
- E1 : 1 ms
- E2 : -0.7 ms

Calculate the following:

f1 (1/s) :

500



A1 (A) :

5



B1 (degrees) :

126



A2 (A) :

5



B2 (degrees) :

126



Hint: How does phase relate to time delay?