

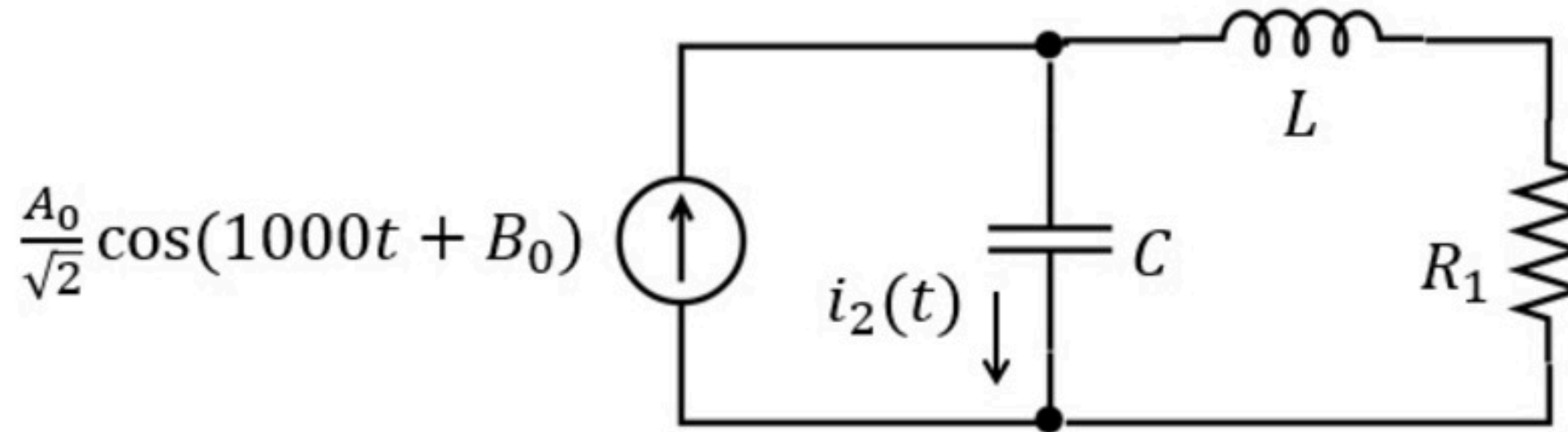
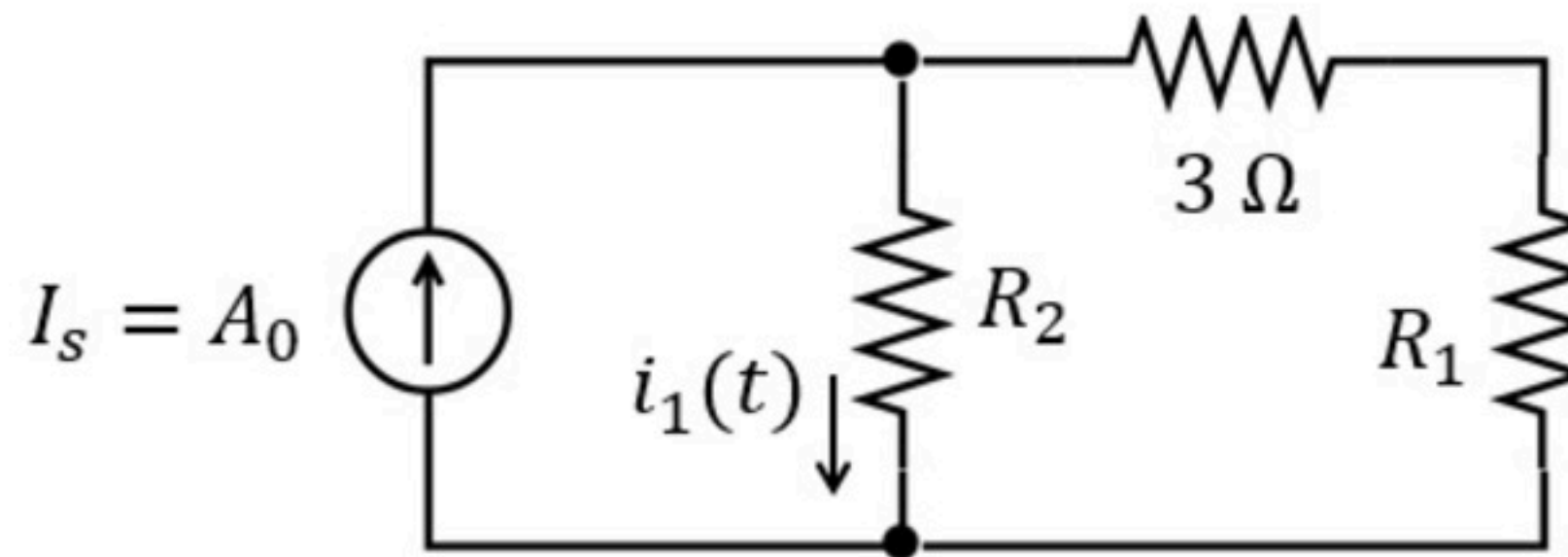
Phasors 006

Problem has been graded.

Find the steady-state currents $i_1(t)$ and $i_2(t)$.

$$i_1(t) = A_1$$

$$i_2(t) = A_2 \cos(1000t + B_2) \quad \text{with } -180^\circ < B_2 \leq 180^\circ$$



Given Variables:

A0 : 2 A

B0 : 25 degrees

C : 200 uF

L : 3 mH

R1 : 6 ohm

R2 : 3 ohm

Calculate the following:

A1 (A) :

1.5

✓

A2 (A) :

1.5

✓

B2 (degrees) :

70

✓

Hint: Solve the second circuit with phasors.