

Student ID: _____ Student Name: _____ Group: _____

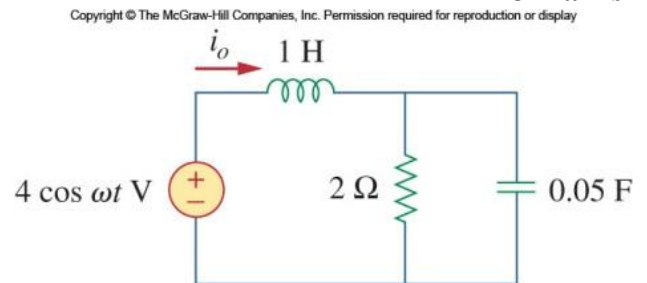
- 1) Transform the sinusoid $i(t) = -8\sin(10t + 70^\circ)$ mA to phasor form using cosine as reference: **1 mark**
- 2) The following phasors are written in a form known as phasor form, rewrite them in rectangular notation. **3 marks**

$$4\angle 0^\circ$$

$$3\angle 90^\circ$$

$$6\angle 30^\circ$$

- 3) For the circuit on the right ($\omega = 10$ rad/s)
Find the impedance seen by the source;

3 marks

- 4) At DC conditions, capacitors appear as open/close circuit while inductors appear as open/close circuit. **1 mark**

- 5) Find the voltage across each capacitor in the circuit on the right under DC conditions. **2 marks**

