

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS  
DEPARTMENT OF ELECTRICAL ENGINEERING  
Dr. Alakhdhar

Student Name:

Student ID#

---

An electric load operates at  $288 \text{ V}_{\text{rms}}$ . The load absorbs a reactive power of  $4.84 \text{ kvars}$  at a leading power factor of **0.9**.

- a) Find the average power absorbed by the load.
- b) Find the apparent power absorbed by the load.
- c) Find the complex power supplied by the source.
- d) Find the current through the load.