**Part A:**

* Fill the table below?

|  |  |
| --- | --- |
| Quantity  | Value |
| $$V\_{R1 p-p} $$ |  |
| $$V\_{R1 p}$$ |  |
| $$V\_{R1 eff}$$ |  |
| $$I\_{R1 eff}$$ |  |
| $$Ɵ\_{ source}$$ |  |
| PF= Cos$ Ɵ$ |  |

* Display Vs and $V\_{R1}$ on the same screen then find$ Ɵ$ ?
* Find $P\_{R}, Q\_{R}, S\_{source}, P\_{L}, Q\_{L}, PF, Z, R\_{eq} and X\_{L} ?$

**Part B:**

* Calculate the reactance load that makes PF near unity?
* The load will be --------------- and it has the value of -------------.

**L**

**O**

**A**

**D**

* Construct the circuit with the Load then finding the quantities in the table?

|  |  |
| --- | --- |
| Quantity  | Value |
| $$V\_{R2 p-p} $$ |  |
| $$V\_{R2 p}$$ |  |
| $$V\_{R2 eff}$$ |  |
| $$I\_{R2 eff}$$ |  |
| $$Ɵ\_{source}$$ |  |
| PF= Cos$ Ɵ$ |  |

* Find $P\_{R}, Q\_{R}, S\_{source}, P\_{L}, Q\_{L}, PF, Z, R\_{eq} and X\_{L} ?$