Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_/\_\_\_/\_\_

**Electrical Power Exam #2**

1. List two circuit safety precautions and one worker safety precaution. (2pts each)
2. Circuit safety precautions

i.

ii.

1. Worker safety precaution with live circuits
2. List three uses of Watt’s Law in any order. (2pts each)
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Calculate the power and show the formula used (1 pt. - state formula; 1 pt. - fill in values w/ labels; 1 pt. - for the numeric answer; and 1 pt. - for the proper tag).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Given** |  |  | **Answer for Power** | | | | |  |
| 3. | 37 KΩ | 10 µA | 3. | \_\_\_\_\_ | | | \_\_\_\_\_ | |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |  |  |  |  |  |  |
| 4. | 2 mA | 57 V | 4. | \_\_\_\_\_ | | | \_\_\_\_\_ | |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |  |  |  |  |  |  |
| 5. | 24 volts | 250 KΩ | 5. | \_\_\_\_\_ | | | \_\_\_\_\_ | |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |  |  |  |  |  |  |
| 6. | 100 µA | 35 MΩ | 6. | \_\_\_\_\_ | | | \_\_\_\_\_ | |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |  |  |  |  |  |  |
| 7. | 12.5 volts | 13 µamps | 7. |  | \_\_\_\_\_ |  | \_\_\_\_\_ |  |  |
|  |  |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |  |  |  |  |  |  |