

3. In a photoelectric experiment on the metal copper, the following values of the stopping potential V_0 were obtained at different wavelengths λ of the incident ultraviolet light.

λ (nm)	200	210	220	230	240
V_0 (volts)	1.27	0.98	0.71	0.46	0.24

- a) Use a graphical method to determine a value for the work function of copper.
- b) Find the maximum velocity of an ejected electron if the copper surface is illuminated by radiation with a wavelength of 122nm, the longest wavelength line of the Lyman series (transitions to $n = 1$) of hydrogen.
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