

Count equation and exposure time calculator.

1. (2/5, 2 hours) Estimate the number of photons/second you would receive for a star with $V=22$ with the NMSU 1m assuming that the combined detection efficiency of the telescope and detector is 50 percent. You can assume that the V bandpass is rectangular with a central wavelength of 5500\AA , a full width of 1000\AA , with an in-band transmission of 80 percent.
2. something

Here is my answer to the question.