## Question:

Two starts are radiating EM light. Star A looks red and star B looks red and star B looks blue. What can be concluded about the temperature of the two stars?

(A) A is hotter than B

(B) *B is hotter than A*

(C) More information is needed to compare the temperature of these stars

## Question:

The intensity of a beam of light is increased but the light's frequency is unchanged. Which of the following is true?

(A) The photons are larger

(B) *There are more photons per second*

(C) The photons travel faster

(D) Each photon has more energy

## Question:

The work function of metal A is 3.0 $eV$. Metals B and C have work functions of 4.0 $eV$ and 5.0 $eV$, respectively. Ultraviolet light shines on all three metals, creating photoelectrons. Rank in order, from largest to smallest, the stopping potential for A, B, and C.

(A) $V_C > V_B > V_A$

(B) $V_A > V_B > V_C$

(C) $V_A = V_B = V_C$