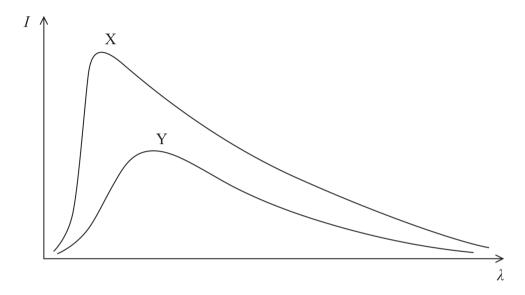
10 Two stars, X and Y, behave as black body radiators. The graphs show how the intensity I of radiation emitted varies with wavelength  $\lambda$  for the two stars.



The stars are both viewed from the same distance.

Which of the following statements can be deduced from the two graphs?

- A Star X is brighter and has a higher surface temperature than star Y.
- **B** Star X is brighter and has a lower surface temperature than star Y.
- Star X is dimmer and has a higher surface temperature than star Y.
- **D** Star X is dimmer and has a lower surface temperature than star Y.