

Problem Set 10

Due Friday Nov 21, 2013

10.1 Space Heater

- (a) Measured from the time when the first rays of sunshine appear above the horizon until the moment when the sun is fully visible, sunrise lasts 2.1 minutes. Based on this information, and assuming that the earth and the sun are “black bodies”, can you estimate the temperature of the sun?
- (b) Estimate the temperature of mars; mars is 1.52 AU away from the sun (1 AU is the distance from earth to the sun), and has only $1/2$ the diameter of the earth.

10.2 Phonons

Reif §10.4

10.3: Email Questions

Email 3 questions