

---

---

## Exercise F4: Inverse-Square Law Apparent Brightness and Luminosity

Student name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

*Check the box with the correct answer.*

**Question 1:** Place your cursor over both stars and note the Distance from Sun information in the pop-up display. Compared to Spica, about how far away from the Sun is Antares?

- a. 1.3 times as far away.
- b. 10 times as far away.
- c. 2.3 times as far away.
- d. Antares is actually closer than Spica.

**Question 2:** The calculated value of Polaris' luminosity is:

- a. 2495 times  $L_{\text{sun}}$
- b. 6040 times  $L_{\text{sun}}$
- c. 5566 times  $L_{\text{sun}}$
- d. 2612 times  $L_{\text{sun}}$