

- 8 Two stars, X and Y, have the same surface temperature. X has a radius 25% larger than the radius of Y.

The luminosity of X is  $L_X$ . The luminosity of Y is  $L_Y$ .

Which of the following is the ratio  $L_X/L_Y$ ?

- ☐ A 1.0
- ☐ B 1.3
- ☐ C 1.6
- ☐ D 2.0

(Total for Question 8 = 1 mark)