The surface temperature of Betelgeuse is $T_{\rm B}$ and the surface area of Betelgeuse is $A_{\rm B}$. The surface temperature of the Sun is $T_{\rm S}$ and the surface area of the Sun is $A_{\rm S}$.

Which row in the table shows a correct comparison of the surface temperature and

| | | $T_{ m _B} > T_{ m _S}$ | $A_{_{ m B}} > A_{_{ m S}}$ |
|----------|---|-------------------------|-----------------------------|
| \times | A | false | false |
| \times | В | false | true |
| \times | C | true | false |
| X | D | true | true |

surface area of Betelgeuse with those of the Sun?

Betelgeuse is a red giant star.