16 The Sun emits light.

The average distance from Earth to the Sun is 1.5×10^{11} m.

The average distance from Mars to the Sun is 2.3×10^{11} m.

A 1.0 m^2 solar panel on a satellite in orbit around Earth receives 1.3 kW of power from the light of the Sun.

Which size solar panel is required to receive the same power if the satellite is in orbit around Mars?

A 1.5 m^2 **B** 2.0 m^2 **C** 2.4 m^2 **D** 3.1 m^2