10 A satellite of mass 150 kg is launched into a geostationary orbit around the Earth. The Earth has a radius of 6.4×10^3 km and a mass of 6.0×10^{24} kg.

Which statement is correct?

A The satellite need not be above the equator.

B The satellite is launched in the westerly direction.

C The height of the orbit from the surface of the Earth is 4.23×10^7 m.

D All geostationary satellites must have the same orbital radius and linear speed.