

- 13** Two satellites X and Y are orbiting at heights of  $5R$  and  $9R$  above the surface of the Earth respectively, where  $R$  is the radius of the Earth.

What is the  $\frac{\text{linear speed of satellite X}}{\text{linear speed of satellite Y}}$ ?

**A** 1.29

**B** 1.34

**C** 1.67

**D** 1.80