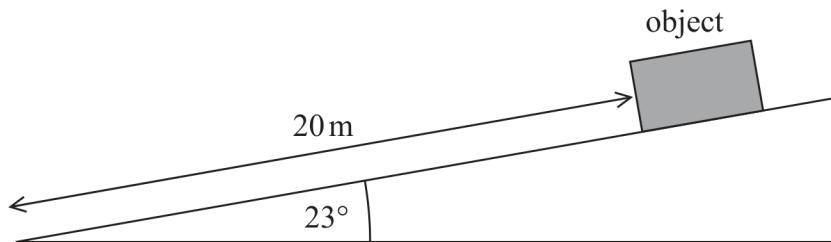


- 8 An object accelerates from rest down a frictionless slope. The object moves a distance of 20 m. The slope is at an angle of 23° to the horizontal, as shown.



Which of the following gives the final speed of the object in ms^{-1} ?

- ☐ A $\sqrt{2 \times 9.81 \times 20 \times \cos 23^\circ}$
- ☐ B $\sqrt{0.5 \times 9.81 \times 20 \times \cos 23^\circ}$
- ☐ C $\sqrt{2 \times 9.81 \times 20 \times \sin 23^\circ}$
- ☐ D $\sqrt{0.5 \times 9.81 \times 20 \times \sin 23^\circ}$

(Total for Question 8 = 1 mark)