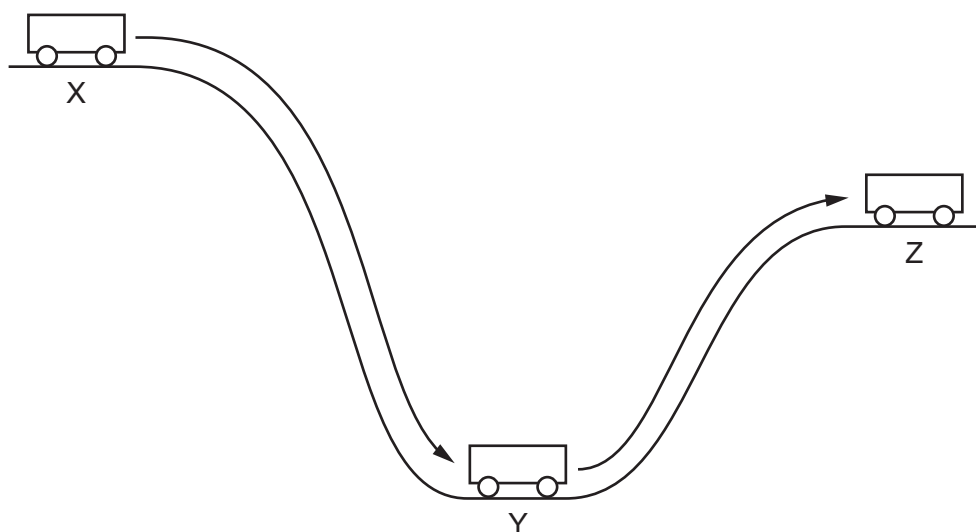


- 16** A trolley starts from rest at X. It rolls down to Y and eventually comes to rest at Z.



Which row is a possible summary of the energy changes during this process?

	X to Y	Y to Z
A	p.e. \rightarrow k.e.	k.e. \rightarrow p.e.
B	p.e. \rightarrow k.e.	k.e. \rightarrow p.e. + heat
C	p.e. \rightarrow k.e. + heat	k.e. \rightarrow p.e.
D	p.e. \rightarrow k.e. + heat	k.e. \rightarrow p.e. + heat

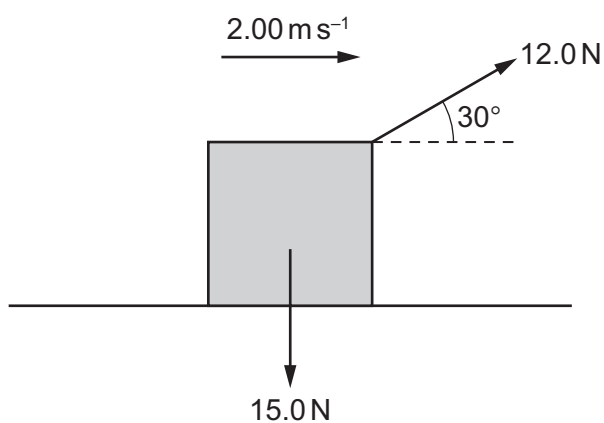
key

p.e. = potential energy

k.e. = kinetic energy

- 17** An object of weight 15.0 N is pulled along a horizontal surface at a constant velocity of 2.00 m s^{-1} .

The force pulling the object is 12.0 N at 30° to the horizontal, as shown.



What is the power used to move the object?

- A** 12.0 W **B** 20.8 W **C** 24.0 W **D** 30.0 W