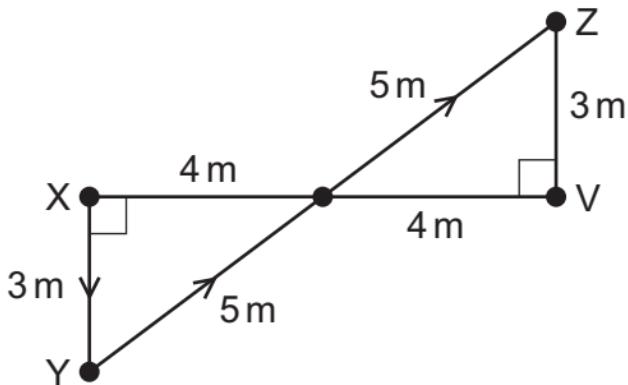


17 An object is moved in a vertical plane from X to Y, and then from Y to Z, as shown in the diagram.



The distances between various points are indicated on the diagram.

Lines XY and VZ are vertical.

The object weighs 20 N.

How much gravitational potential energy does the object gain by moving from X to Z?

A 60 J

B 120 J

C 140 J

D 260 J