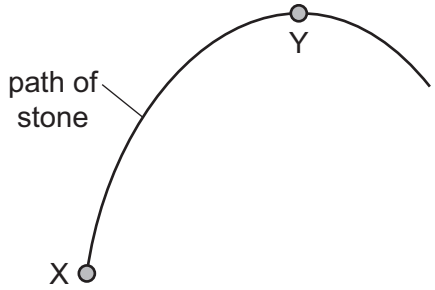
10 The diagram shows the path of a stone that is thrown from X and reaches its maximum height at Y.



The stone gains 10 J of gravitational potential energy as it moves from X to Y.

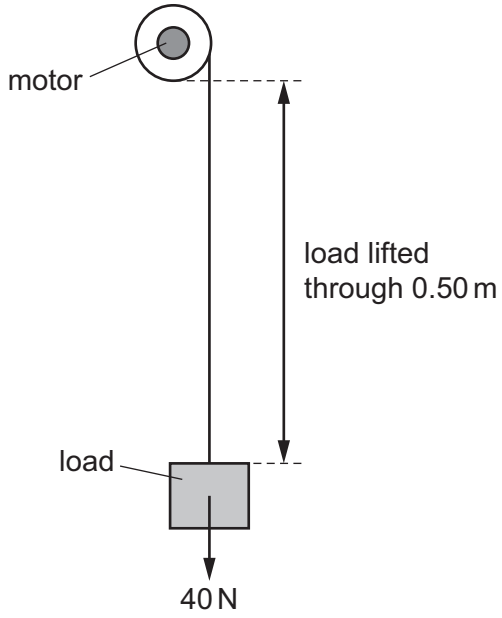
The stone has 2.0 J of kinetic energy at Y.

Air resistance can be ignored.

How much kinetic energy did the stone have immediately after it was thrown at X?

A 2.0 J **B** 8.0 J **C** 10 J **D** 12 J

11 A motor is used to lift a load of 40 N.



The power of the motor is 40 W and the system is 20% efficient.

How long does it take the motor to lift the load through 0.50 m?

A 0.50 s **B** 2.5 s **C** 5.0 s **D** 25 s