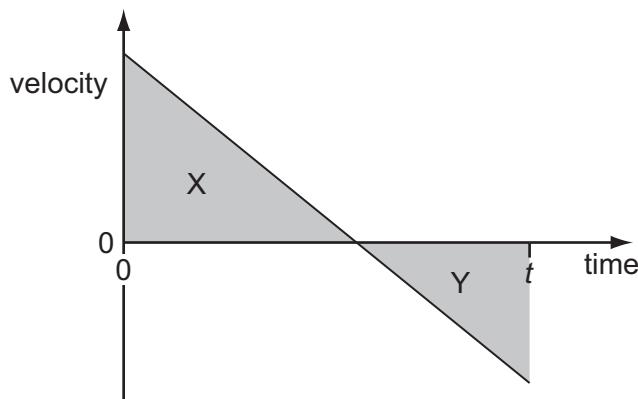


- 8 The velocity-time graph below is for a stone thrown vertically up into the air. Air resistance is negligible.



The stone is thrown up at time zero.

Area X represents a distance of 5 m. Area Y represents a distance of 3 m.

What is the displacement of the stone from its initial position at time  $t$ ?

**A** 2 m

**B** 3 m

**C** 5 m

**D** 8 m

**Space for working**