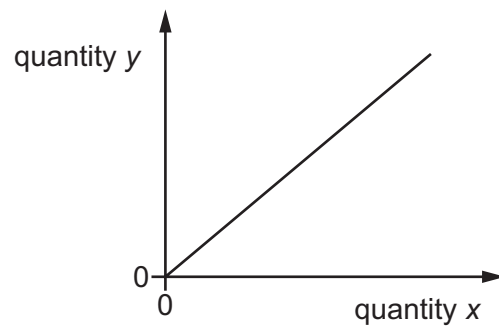


- 8 The graph shows the variation of a quantity y with a quantity x for a body that is falling in air at constant (terminal) velocity in a uniform gravitational field.



Which quantities could x and y represent?

	x	y
A	air resistance	acceleration
B	loss of height	gain in kinetic energy
C	loss of potential energy	work done against air resistance
D	time	velocity

- 9 A ball of mass 2.0 kg travels horizontally with a speed of 4.0 m s^{-1} . The ball collides with a wall and rebounds in the opposite direction with a speed of 2.8 m s^{-1} . The time of the collision is 150 ms .

What is the average force exerted on the wall?

- A** 16 N **B** 37 N **C** 53 N **D** 91 N

- 10 An ice-hockey puck of mass 150 g moves with an initial speed of 2.0 m s^{-1} along the surface of an ice rink.

The puck slides a distance of 30 m in a straight line before stopping.

What is the average frictional force acting on the puck?

- A** 0.010 N **B** 0.020 N **C** 0.067 N **D** 0.44 N