

Multiple Choice Answers

Q5: C

Multiple Choice Answers

Q4: B

Multiple Choice Answers

Q6: D

Multiple Choice Answers

Q7: C

Multiple Choice Answers

Q7: D

Multiple Choice Answers

Q6: B

2(a)	$v^2 = u^2 + 2as$
	$u^2 = 8.7^2 - (2 \times 9.81 \times 1.5)$
	$u = 6.8 \text{ m s}^{-1}$
2(b)	(magnitude of) force on ball (by ground) equal to force on ground (by ball)
	(direction of) force on ball (by ground) opposite to force on ground (by ball)
2(c)(i)	$(p =) 0.059 \times 8.7 \text{ or } 0.059 \times 5.4$
	change in momentum = $0.059 (8.7 + 5.4)$
	= 0.83 N s
2(c)(ii)	resultant force = $0.83 / 0.091 \text{ or } 0.059 [(8.7 + 5.4) / 0.091]$
	= 9.1 N
2(c)(iii)	$(W =) 0.059 \times 9.81$
	$(W =) 0.58 \text{ (N)}$
	force = $9.1 + 0.58$
	= 9.7 N
2(d)	straight line with a positive gradient and starting from a non-zero value of speed at $t = 0$ and ending when $t = T$