A-Level Physics: **s23 13**

Multiple Choice Answers

Q5: C

A-Level Physics: **s24 11**

Multiple Choice Answers

Q4: B

A-Level Physics: **m22 12**

Multiple Choice Answers

Q6: D

A-Level Physics: **s21 11**

Multiple Choice Answers

Q7: C

A-Level Physics: **w21 11**

Multiple Choice Answers

Q7: D

A-Level Physics: **m24 12**

Multiple Choice Answers

Q6: B

A-Level Physics: **s21 22**

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 =) 0.059×8.7 **or** 0.059×5.4
	change in momentum = 0.059 (8.7 + 5.4) = 0.83 N s
2(c)(ii)	resultant force = 0.83 / 0.091 **or** 0.059 [(8.7 + 5.4) / 0.091] = 9.1 N
2(c)(iii)	(W =) 0.059×9.81
	(W =) 0.58 (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 $t = T$