Question Number	Scheme	Marks
4 (a)	$0.2\times£10+0.3\times£12+0.5\times£15$	M1
	$=[£]13.10$	A1
		(2)
(b)	10 10 10 10 10 12 (×3) 10 10 15 (×3) 10 12 15 (×6) 12 12 12 12 12 15 (×3) 10 12 12 (×3) 15 15 15 12 15 15 (×3) 10 15 15 (×3)	B1 B1
		(2)
(c)	$P(10) = 0.2$ $P(12) = 0.3$ $P(15) = 0.5$	B1
	Median can be 10, 12 or 15	B1
	$P(M=10) = 0.2^3 + 0.2^2\times0.3\times3 + 0.2^2\times0.5\times3$ **or** $1-0.8^3-3\times0.8^2\times0.2$	M1
	$P(M=12) = 0.3^3 + 0.3^2\times0.5\times3 + 0.3^2\times0.2\times3 + 0.2\times0.3\times0.5\times6$	M1
	$P(M=15) = 0.5^3 + 0.5^2\times0.3\times3 + 0.5^2\times0.2\times3$ **or** $1-0.5^3-3\times0.5^2\times0.5$	M1
	M | 10 | 12 | 15 $P(M=m)$ | $\frac{13}{125}=0.104$ | $\frac{99}{250}=0.396$ | $\frac{1}{2}=0.5$	A1
		(6)

	Notes	Total 10
(a)	**M1**	For $0.2\times10+0.3\times12+0.5\times15$ May be implied by a correct answer
	A1	Cao Allow 13.1
(b)	**B1**	B1 for at least 5 possible combinations. Ignore repeats. May be seen in part c
	B1	For all 10 possible combinations. Ignore repeats. May be seen in part c
(c)	**B1**	Correct probabilities – may be seen in an equation or implied by a correct probability
	B1	All 3 medians and no extras
	M1	A correct method for one of the probabilities (May be implied by a correct probability)
	M1	A correct method for two of the probabilities (May be implied by 2 correct probabilities)
	M1	A correct method for all three probabilities (May be implied by 3 correct probabilities) or 3 probabilities that add to 1
	A1	Cao Need not be in a table but probabilities must be attached to the correct median