Question 8 – 4:

8(a)	$\frac{1}{2}$ or 0.5 oe	**2**	**M1** for $10-3=11p+3p$ oe or better
8(b)	$[m=]\frac{2k}{c^2-g}$ oe final answer	**3**	**M1** for correctly isolating m terms **M1** for correctly factorising **M1** for dividing by a bracket with two terms to the final answer Maximum mark **M2** if final answer incorrect
8(c)	0 4.5 oe	**5**	**B4** for $2x^2-9x\,[=0]$ or $9x-2x^2\,[=0]$ or better OR **M2** for $(2x+3)+4(x-3)=(x-3)(2x+3)$ or better or **M1** for $(2x+3)+4(x-3)$ seen oe or common denominator $(x-3)(2x+3)$ oe **B1** for $2x^2-6x+3x-9$ or better seen
8(d)	$y^2-10y+21[=0]$ or $x^2-4x-12[=0]$	**M2**	**M1** for $y^2+5(12-2y)=39$ oe or $5x+\frac{(12-x)^2}{2^2}=39$ seen oe
	$(y-3)(y-7)\,[=0]$ or $(x+2)(x-6)\,[=0]$	**M1**	or for correct factors for *their* 3– term quadratic equation or for correct substitution into quadratic formula or correctly completing the square for *their* 3–term quadratic equation
	$x=-2$ $y=7$ $x=6$ $y=3$	**B2**	**B1** for $x=-2, x=6$ or for $y=7, y=3$ or for one correct pair of x and y values
8(e)	$2x^3+x^2-54x+72$ final answer	**3**	**B2** correct expansion of three brackets unsimplified or for final answer of correct form with 3 out of 4 terms correct or **B1** correct expansion of two brackets with at least three terms out of four correct