

Question 3 – 2:

3(a)(i)	6	3	B2 for $4x + 6 = 30$ or better or M1 for $x + x + 7 + 2x - 1 [= 30]$
3(a)(ii)	21	3	M2 for $(555 - \text{their } x \times 15 - \text{their } (x + 7) \times 18) \div \text{their } (2x - 1)$ or M1 for $\text{their } x \times 15$ or $\text{their } (x + 7) \times 18$
3(b)(i)	8	2	M1 for isolating the term in w or correctly removing all fractions e.g. $\frac{3w}{16} = 1 + \frac{1}{2}$ or better or $3w - 16 = 8$
3(b)(ii)	-3	2	M1 for $2^{-y} = 8$ or $2^y = \frac{1}{8}$ or $2^{-y} = \text{their } w$ or better
3(c)(i)	$[p =] \frac{1}{2}$ oe $[q =] 1$	2	B1 for each If zero scored, SC1 for 2 values satisfying one of the original equations
3(c)(ii)	$[u =] 30$ and 150 $[v =] 0$ and 360	4	B1 for each OR SC1 for $\sin u = \text{their } p$ and $\cos v = \text{their } q$ SC1 if their two different angles for u sum to 180 or if their different two angles for v sum to 360