

Question			Answer	Marks	AOs		Guidance
15			$\mu = 35$ soi	B1	1.2	by symmetry	may be embedded in $N(35, 4^2)$ or $N(35, 16)$ M0 if continuity corrections used their 0.7887 must be from use of $N(35, 4^2)$
			$\sigma = 4$ seen	B1	3.1b	$35 - 31 = 4$	
			use of $N(35, 4^2)$ to obtain a value for $P(30 < X < 40)$	M1	2.1		
			[cdfNormal(30, 40, 35, 4) =] 0.788700... BC to 2 or more dp	A1	1.1		
			use of $Y \sim B(50, \text{their } 0.7887)$ to find $P(Y \leq K)$ or $P(Y \geq K)$	M1	3.1b	eg cdfBinomial(50, 0.7887, 45, 50)	
			$[1 - P(Y \leq 44)] = 0.032$ to 0.034 BC	A1	1.1		
				[6]			