Question		on	Answer	Marks	AO	Guidance	
8 (a)			When $x=0$ number of cakes is 190	B1	3.4	Allow www	
				[1]			
8 (b)			(1.20, 50) gives $50=1.2m+c$	M1	3.3	Setting up simultaneous equations for <i>m</i> and <i>c</i>	
			(2.40, 140) gives $140 = 2.4m + c$				
			m = 75, c = -40	A1	3.3	Allow for values given or $y = 75x - 40$ seen	
			Alternative method			using data to calculate <i>m</i>	
			$m = \frac{140 - 50}{100}$	M1			
			2.4–1.2				
			m = 75, c = -40	A1		dlow for values given or $y = 75x - 40$ seen	
				[2]			
8	(c)		[When x is small,] y is negative and	<b>E1</b>	3.5b	Negative <i>y</i> -values and <i>y</i> cannot be negative must both be stated or	
			number of cakes donated cannot be negative			implied	
				[1]			
8	( <b>d</b> )		Upper bound for demand to exceed supply	M1		Attempt to find one of the bounds for x using their $y = 75x - 40$	
			Lower bound for <i>y</i> positive				
			190 - 70x = 75x - 40			Accept $x < 1.586$ or $x < 1.59$ or	Note the prices $\pounds 1.58$ and $\pounds 1.57$
			So $x < \frac{46}{2}$	Al		$x < 1.58$ or $x \le 1.56$	do not lead to integer values for
			29			Allow use of $<$ or $\leq$	the number of cakes, so the fully
						Allow for a separate inequality	correct answer is $x \le 1.56$
						or as part of a combined	
						inequality with lower bound	
			y = 75x - 40 > 0			Accept $0.533 < x$ or $0.53 < x$ or	Note the prices £0.54 and £0.55
			$r > \frac{40}{2}$	A1		$0.54 < x \text{ or } 0.56 \le x$	do not lead to integer values for
			75			Allow use of $<$ or $\leq$	the number of cakes, so the fully
						Allow for a separate inequality	correct answer is $0.56 \le x$
						or as part of a combined	
						inequality with upper bound	
				[3]			