Question			Answer	Marks	Part Marks and Guidance	
1	(a)		£11 or 1100p	**1**		
	(b)	(i)	$C = 0.2w + 8$	**1**		
		(ii)	7.5 with supporting algebra	**3**	**M1** for $0.6w + 5 =$ *their* $(0.2w + 8)$ **Dep M1** for *their* $0.4w =$ *their* 3 If 0, **SC1** for 7.5 as final answer	i.e. a correct equation involving w i.e. collecting w and numbers If simultaneous equations used then **M1** for $C = 9.5$ (must be clear) and **Dep M1** for substitution in either equation
		(iii)	No number of windows gives the same cost or Richard is cheaper for [up to] 7[.5] windows oe	**1**		FT sensible comment following any non-integer answer See appendix for exemplar comments

2	**(a)**		1, __, 0.25, 0.125, ___, ___	2	**B1** for two values correct	Accept ¼, 1/8
	(b)		5 or 6 of *their* points correctly plotted Curve through *their* six points	1 FT1	± ½ small square ± ½ small square. Continually decreasing curve. Not too thick or hairy.	
	(c)		1.2 to 1.4	1		

3			Expression Equation Identity	1 1 1		

4	(a)		[*C* =] 0.3*n* + 120 oe	2	Accept 0.3 × *n, n*0.3 etc Ignore £ or p **M1** for 0.3*n* seen If **0** scored then **SC1** for [*C* =] 30*n* + 120 or 30*n* + 12000 oe	Condone *m* or *x* etc, except *c*, used instead of *n*
	(b)	(	75	3	nfww **M1** for 110 = 0.4*n* + 80 **M1** for 30 = 0.4*n* If 75 found, allow full marks for greater answer including eg journey from bus depot	First **M1** for substitution (may be earned after rearrangement) Second **M1** for one correct constructive step in solution or initial rearrangement eg *B* – 80 = 0.4*n*) Just 30 = 0.4*n* seen implies both **M1**s If no algebra allow: **M1** for 110 – 80 or 30 seen, but not 30p **M1** for 30/0.4 or (110 – 80)/0.4 or for 0.4 × 75 = 30 Allow **B3** for correct solution arrived at after trial and improvement

		(ii)	Leading [question] oe 'Do you think that your bus hire was good value for money' or Suitable version with responses eg 'Yes/No' boxes or at least 3 'non-overlapping' categories covering all eventualities	1 1	Or biased or 'it needs response categories' Accept other 'Do you think that...' also trying to improve on other aspects of wording **0** for any 'Don't you think that...'	Accept eg 'it's too vague – I don't know what good means' **0** for 'it can only be answered Yes or No' Condone improved question if additional question eg 'Why?' See appendix for exemplars

5	**(a)** ♠		$70n + 150$ oe	**2**	**M1** for $70n$ oe or for e.g. $70x + 150$ oe	Accept $70 \times n$, $n70$, etc; or capital N ignore £ or p;
	(b) ♠		$70n + 150 = 3300$ or $3300 - 150 = 70n$ 45	**1** **2**	or FT from *their* (a); must see equation to gain this mark **M1** for one correct step in solving *their* equation eg $70n = 3150$ but M0 for just $3300 - 150 = 70n$ – not sufficient **SC1** for embedded answer on answer line or in body of script	Allow other letters allow M1 for $n = \frac{C - 150}{70}$ seen and then 3300 substituted for C even if no equation with n then seen ignore £ or p allow M1 for correct step in solving inequality and then A1 for $n \leq 45$

6	**(a)**		$18y + 30$ as final answer	1		
	(b)		$5(y - 3)$ as final answer	1	oe Condone omission of final bracket; allow inclusion of multiplication sign	
	(c)		$\frac{13}{2}$ as final answer	3	oe ignore subequent conversion **M2** for $2x = 13$ Or **M1** for one side of this correct or for x terms or constant term collected correctly AND **M1** for *their* answer correct FT (rot to at least one dp if needed), after at least **M1** earned	eg **M1** for $2x - 2 = 11$ eg allow final **M1** for 1.08 after $12x = 13$

7	**(a)**		$C = 30 + 25n$ oe	2	**M1** for $25n$ oe	Must have $C =$ for **2** marks Ignore £ signs; accept $25 \times n$; condone $n25$ and N used for n
	(b)		2.5 oe	2	**M1** for $62.5(0) = 25n$ or for $62.5(0)/25$ Allow **SC2** for answer $2 < n < 2.5$ with justification that Dave's Plumbing may round times up to next half hour	Allow **2** for 2h 30m Allow **M1** for $25 \times 2.5 + 30 = 92.50$ or similar as answer

8	(a)		Correct expansion of brackets to $6x - 3$ [= 6] $6x = 9$ or $6x - 9 = 0$ or FT $x = \frac{9}{6}$ or $\frac{3}{2}$ or 1.5 oe or FT	M1 M1 M1	Need not be in equation, but if in eqn, rhs must be correct; or **M1** for correct division to $2x - 1 = 2$ For correct collection of terms, FT isw for wrong conversion or embedded answer after acceptable answer seen FT *their ax* = *b* or *their ax* + *b* = 0 for $a \neq 1$ or 0, $b \neq 0$ Allow **B3** for $\frac{9}{6}$ or $\frac{3}{2}$ or 1.5 oe as answer nfww Or **SC2** for embedded answer eg $6 \times 1.5 - 3 = 6$	If their error leads to possible rounding, FT only for answer correctly rounded to 1 dp or rot to 2 dp or more Flow diagram: Allow **M2** for complete, correct, reversed flow diagram from start Or **M1** for $6x - 3 = 6$ and **M1** for complete, correct, reversed flow diagram from that stage
	(b)	(	25.28	1	Allow $\frac{632}{25}$ oe	
		(ii)	53	1		

9	(a)		$10m + 2d$	2	Accept $10\times m + 2\times$d and other letters if clear **B1** for 1 correct term seen	Mark final answer so eg $10m + 2d = 12md$ scores **B1**
	(b)	(i)	$2t^2$	1	Accept equivalent statements eg $2t \times t$	Mark final answer
		(ii)	800	1		

10	**(a)**	$12a^3$	**2**	Condone $12 \times a^3$ for **2** marks **B1** for 12 $[a^k]$,accept $k = 0$ **or B1** for $[k]a^3$ k not equal to 0 **or SC1** only for $12 + a^3$	so 12 only scores **B1** so a^3 only scores **B1**
	(b)	25	**2**	**M1** for $4 \times -2.5 \times -2.5$ or better soi **or** for 6.25 seen **or SC1** for answers of -25 or 100	
	(c)	$10x - 35$ [= 3] or $2x - 7 = 3/5$ $10x = 38$ or $2x = 7.6$ or FT [x =] 3.8 oe (accept 38/10 or better isw)	**B1** **M1FT** **M1FT**	For dealing with brackets correctly For getting to form $ax = b$; FT *their* wrong first step for $a \neq 0$ or 1 and $b \neq 0$ FT *their* $ax = b$ with $a \neq 0$ or 1 or b and $b \neq 0$ Allow **B3** for 3.8 www	Allow FT at division step isw – does not need to be evaluated If division step not shown accept answer for 2nd **M1** correct to 2 sf or better Allow correct embedded solution in original equation as final answer to score full marks i.e. $5(2 \times 3.8 - 7) =$
	(d)	$4x(3x + 2y)$	**2**	**M1** for $2(6x^2 + 4xy)$ or $4(3x^2 + 2xy)$ or $2x(6x + 4y)$ or $x(12x + 8y)$	Condone final bracket omitted Allow with '×' signs