

Question	Working	Answer	Mark	Notes
1 (a)	$\frac{23\,622}{0.93}$			M1 Alt $x - 0.07x = 23\,622$ oe
		(\$) 25 400	2	A1
(b)	$\frac{23\,622 - 19\,880 [= 3\,742]}{23\,622} \times 100$ <b>or</b> $\frac{19\,880}{23\,622} \times 100 (= 84.158\dots)$			M1dep
		15.8(%)	2	A1
(c)	$\frac{d}{10} \times 1.4(0)$			M1
	$\frac{d}{10} \times 1.4(0) + 938 + "3\,742" = 0.4d$ oe			M1 dep ft their 3742 from (b)
	$0.4d - \frac{d}{10} \times 1.4 = 938 + "3\,742"$ oe			M1 dep collecting like terms on opposite sides
		18 000(km)	4	A1
Total 8 marks				

Question	Working	Answer	Mark	Notes
2 (a)	$75 = 3 \times 5 \times 5$ $90 = 2 \times 3 \times 3 \times 5$ $120 = 2 \times 2 \times 2 \times 3 \times 5$ <b>or</b> correct factor trees <b>or</b> <div> <div>3</div> <div>5</div> <div> <div>75</div> <div>25</div> <div>5</div> </div> <div> <div>90</div> <div>30</div> <div>6</div> </div> <div> <div>120</div> <div>40</div> <div>8</div> </div> </div>			M1 implied by correct answer
		15	2	A1
(b)	Both could sound together at 9.22 and LCM of 8 and 12 is 24 <b>or</b> 930 938 946 910 922 934 946			M1
		09 46 oe	2	A1
Total 4 marks				

Question	Working	Answer	Mark	Notes
3 (a)	$3a + 5a = 4 - 6$ oe			M1
		$-\frac{1}{4}$	2	A1
(b)	$-3p > 12$ or $-12 > 3p$			M1
		$p < -4$	2	A1
(c)		$w \leq 5$	1	B1 allow use of $x \leq 5$
(d)		$x \geq -1$ or $x > -1$ and $y \geq 0$ or $y > 0$	1	B1 allow $-1 < x < n$ where $n \geq 2$ allow $0 < y < m$ where $m \geq 6$
	$y = -2x + \dots$ or $y = \dots x + 4$			M1
		$y \leq -2x + 4$ or $y < -2x + 4$ oe	2	A1
Total 8 marks				

Question	Working	Answer	Mark	Notes
4 (a)		$x, 23 - x, 31 - x, 27 - x$ $x - 5, x - 10, x - 10$ $0$	3	B1 B1 B1
(b)	$x + 56 = 75$			M1ft
		19	2	A1
(c)(i)	17		1	B1ft their "27" – " 10"
(ii)	44		1	B1ft $2x - "5" + "31" - "20$
(d)	$\frac{"19"-5}{49}$			M1 denominator of 49, numerator < 49
		$\frac{14}{49}$	2	A1ft oe (0.2857... allow 2dp truncated or rounded)
Total 9 marks				

Question	Working	Answer	Mark	Notes
5 (a)	Factorising into 2 brackets			M1 When multiplied out it must give at least 2 of the 3 terms correct
		$(x+6)(x-1)$	2	A1
(b)	$\frac{4(x+3)-5(2x-2)}{20}$ or $\frac{x+3}{5}-\frac{x-1}{2}$			M1
	$\frac{4x+12-10x+10}{20}$ or $\frac{2x+6-5x+5}{10}$			M1
		$\frac{-3x+11}{10}$	3	A1oe
Total 5 marks				