

MARK SCHEME for the October/November 2012 series

7101 COMMERCIAL STUDIES

7101/02

Paper 2 (Arithmetic), maximum raw mark 100

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2012 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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Section A

1	(a) 8.32(5) or 8.33	3	M2 $\frac{450 \times 3.7}{100} \times \frac{6}{12}$ or M1 $\frac{450 \times 3.7 \times 6}{100}$ SC1 answer 99.9(0)
	(b) 297.48	3	M2 8.04×37
	(c) 0.13	3	M1 $3.12 \times 0.82 (= 2.5584)$ dep M1 subtraction from 2.6884
2	(a) 25.5	3	M1 $2510 - 2000$ or M1 $2510/2000$ M1 "510"/2000 $\times 100$ M1 "1.255" $\times 100 - 100$
	(b) 332 000	3	M1 25×1000 M1 $13.28 \times$ figs 25 or ans figs 332
	(c) 1.108	3ft	M1 $1\frac{7}{65}$ A1 1.1076(92..) B1 ft from 4dp answer
3	(a) 11055.56 or 11055.57	6	M1 9000×1.042 M1 "9378" \times "1.042" M1 "977.876" \times "1.042" M1 "10182.29" \times "1.042" M1 "10609.95" \times "1.042" Their 1.042 must be consistent for the M4
	(b) 9400	6	M1 $200000 \times \frac{1}{4} \div 100$ A1 500 M1 800 M1 15×540 A1 8100
4	(a) 948.71 or 948.72	5	M1 $20000/78$ A1 256.41 M1 "256.41" $\times 100$ M1 "25641" $\times 3.7/100$ or M1 $20000 \times 3.7/100$ A1 740 M1 "740"/78 M1 9.48719×100
	(b) (i) $1\frac{1}{4}$ or $\frac{5}{4}$	2	B1 $\frac{125}{100}$ oe
	(ii) 1.25 cao	1	
(c) 2.41 cao	2	B1 2.407(407...)	
5	(a) bar chart	3	B1 correct heights B1 equal widths B1 correct labels on centre of bars
	(b) 7	1	B0 if 20 is included on answer line
	(c) 6 www	2	M1 mention of finding 30 th M1 xf (20, 70, 96, 140, 32)
	(d) 6.07	4	M1 xf (20, 70, 96, 140, 32) M1 Σxf M1 $\Sigma xf \div 59$ (358)
	(e) 1080	2	M1 270×4

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6	(a) (i) 3(.00)	1	
	(ii) 6.5(0) to 6.7(0)	1	
	(iii) 3.4 to 3.6	1	
	(iv) 1.2(0) cao	3	M1 subtracting 2 y-values on the line M1 dividing by the difference in the corresponding x-values
	(b) (i) 480	3	M1 $3 + 2 + 5$ or 10 M1 $(1600 / 10) \times 3$
	(ii) 600	3	M2 $1500 \times 2 / 5$ or M1 $1500 / 5$
7	(a) 293.15	3	M1 $4.510 \times 10 / 100$ M1 "0.451" $\times 650$ or M1 650×4.51 M1 "2931.5" $\times 10 / 100$
	(b) 27.64(8) or 27.65	4	M1 3.96×0.98 M1 $3.8808 - 3.42$ M1 0.4608×60 or M1 60×3.96 M1 $237.60 \times 98 / 100$ M1 $232.848 - 60 \times 3.42$
	(c) 1869. 21	5	M1 161 M1 "161" $\times 0.86$ M1 1610×1.075 M1 adding "138.46" and "1730.75"

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Section B

8	(a) 42240, 28160, 35200	8	M2 “132000” × 0.8 or M1 160000 – 28000 A1 105600 B1 75000 M1 105600 × 30000/“75000” (6/15) M1 105600 × 20000/“75000” (4/15) M1 105600 × 25000/“75000” (5/15)
	(b) 66	2	M1 “105600”/160000 × 100 allow SC2 80
	(c) 40	2	M1 30000/“75000” × 100
9	(a) 40	5	B1 7½ M1 5 × “7½” B1 2½ M1 adding 6 days
	(b) 2.5	3	B1 1 hour more M1 1/40 × 100
	(c) 1042(.72) or 1043	4	M1 200 × 0.98 A1 196 M1 “196” × 5.32 or M1 5.32 × 0.98 A1 5.2136 M1 200 × 5.2136 or M1 200 × 5.32 A1 1064 M1 “1064” × 0.98
10	(a) 100 000	3	M1 60/360 M1 600 000 × 60/360
	(b) 210	3	M1 350 000/600 000 M1 360 × 7/12
	(c) 72	3	M2 360 × 20/100
	(d) 1200	3	M1 30000/20000 M1 “1.5” × 800
11	(a) May 29 cao and www	6	B1 correct date or date shift column See AG M1 product of d(ates) and x(money) B1 Σx = 25690 M1 Σdx M1 their Σdx/“25690”
	(b) (i) 795	3	M1 780/104 (= 7.5) M1 106 × 780/104
	(b) (ii) 110	3	M1 825/750 M1 100 × 825/750