



# Mark Scheme (Results)

## Summer 2014

### Pearson Edexcel PLSC in Mathematics Year 6 (JMA01/01)

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## General Marking Guidance

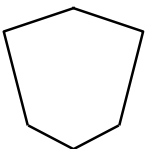
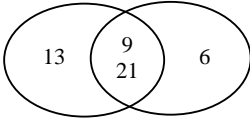
- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

## Section A

### Multiple Choice Questions

Question number	Answer		Mark
1	B	9	1
2	D		1
3	D	$65 + 35$	1
4	B	14:50	1
5	A	A	1
6	C	45	1
7	C	$\frac{2}{4} + \frac{1}{2}$	1
8	D	4 and 7	1
9	D	5.3	1
10	C	21	1
11	D	150 cm	1
12	D	(3,2) and (1,4)	1
13	B	B	1
14	D	21	1
15	C	24	1
16	C	340	1
17	B	17	1
18	B	5	1
19	B	B	1
20	D	$54 \text{ cm}^2$	1

## Section B

Question number	Working	Answer	Mark	Notes
21			1	B1  Vertices should be to within 2mm of vertices on grid.
22		6 triangles shaded	1	B1  Indicated clearly as being chosen – e.g. ticked
23		215	1	B1
24		-3, 29, 37	2	B2  B1 for two correct answers  SCB1: if 29 is incorrect award B1 for “29”+ 8 as long as -3 is correct
25 (a)		10:45	2	B1
(b)	“10:45” + 1 hr 35 min	12:20		B1 ft
26		3 correct blocks	2	B2  B1 for two correctly drawn blocks
27			2	B2  B1 for two correct answers
28 (a)	8.95 – 5.2	3.75 m	3	B1 Accept 375 cm as long as <b>cm</b> clearly indicated
(b)	eg 12.1 + 13.2 + 12.5 = “37.8” 51.3 – “37.8” = “13.5”	13.5 seconds		M1 for complete method  A1
29		18	1	B1
30	2 : 3 4 : 6 6 : 9 8 : 12  20 ÷ 5 = “4” “4” x 2 = “8” “4” x 3 = “12”	8 adults  12 children	2	B1  B1  SCB1 for 12 adults and 8 children or the correct ratios of 4:6 or 6:9 in the working or on the answer line or fully correct method

Question number	Working	Answer	Mark	Notes
31 (a)	fourth vertex at (6,3)	Square drawn	3	B1 Accept a 2 mm tolerance
(b)		(6,3)		B1 ft
(c)		Rectangle with area $12\text{cm}^2$		B1
32 (a)		18	3	B1
(b)		25		B1
(c)		24		B1
33		<ul style="list-style-type: none"> <li>10 cm with 4 larger and 5 smaller</li> <li>12.5 cm with 4 larger and 4 smaller</li> <li>30 cm with 3 larger and 4 smaller</li> <li>16.6 cm or 16.7 cm or <math>16\frac{2}{3}</math> cm with 4 larger and 3 smaller</li> <li>40 cm with 3 larger and 3 smaller</li> </ul>	3	B1 for 10, 12.5, 30, 16.6 or 16.7, 40 B1 (dep) B1 (dep)
34		158	1	B1
35 (a)		16	2	B1
(b)		2		B1

Question number	Working	Answer	Mark	Notes
36 (a)		0.3	2	B1
(b)		Explanation That show why <b>Joe is incorrect</b>		B1 -one ball is 0.2 or two balls is 0.4 . . . -half of 5 is $2\frac{1}{2}$ -can't have $\frac{1}{2}$ a ball
37 (a)		6 hr 15 min	3	B1 6 hr – 6 hr 30 min inclusive
(b)		17.5		B1 16 – 19 inclusive
(c)		2:30		B1 2:20 – 2:40 inclusive
38 (a)		7	3	B1
(b)		4		B1 ft SCB1 for (a) having no answer and 3 given in (b)
(c)		2 or 14		B1
39		Triangle	2	B1
		4		B1
				In any order
40		Three whole numbers that multiply to 20	1	B1 e.g. <ul style="list-style-type: none"> <li>• 20 x 1 x 1</li> <li>• 10 x 2 x 1</li> <li>• 5 x 4 x 1</li> <li>• 5 x 2 x 2</li> </ul>

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