

---

**MATHEMATICS**

**0845/01**

Paper 1

**April 2019**

MARK SCHEME

Maximum Mark: 40

---

**Published**

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 Markers were instructed to award marks. It does not indicate the details of the discussions that took place at an Markers' 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 End of Series Report.


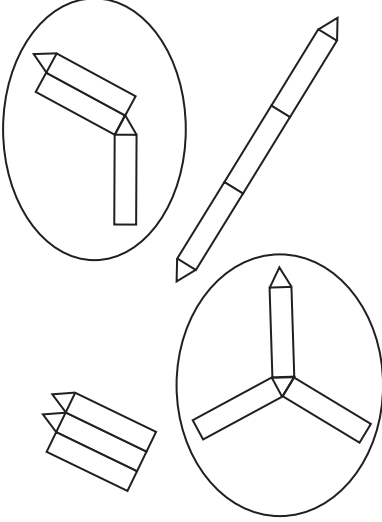
Cambridge will not enter into discussions about these mark schemes.

**Mark scheme annotations and abbreviations**

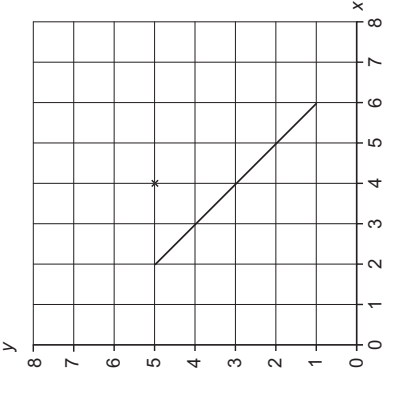
<b>M1</b>	method mark
<b>A1</b>	accuracy mark
<b>B1</b>	independent mark
<b>FT</b>	follow through after error
dep	dependent
oe	or equivalent
cao	correct answer only
isw	ignore subsequent working
soi	seen or implied

---

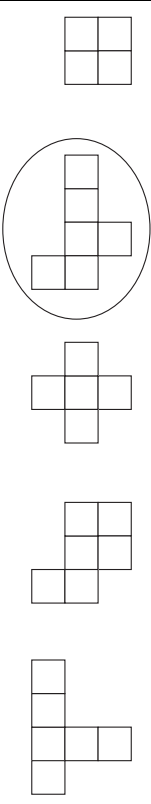
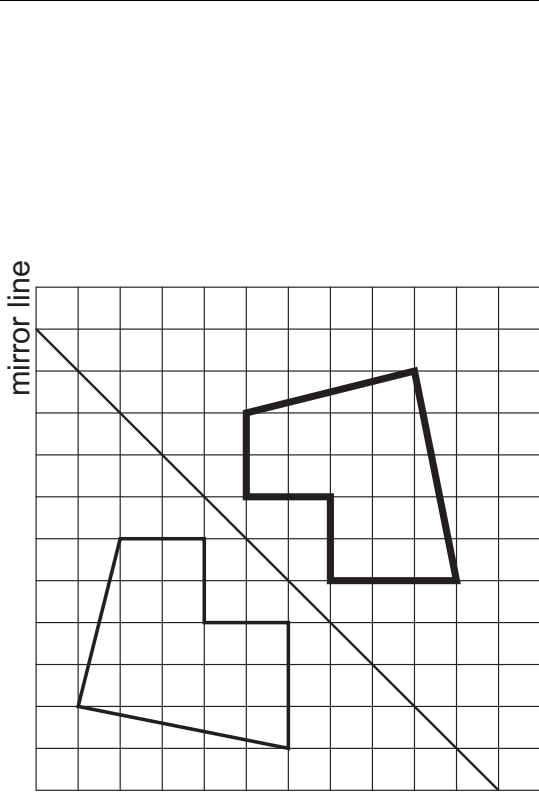
This document consists of **6** printed pages.

Question	Answer	Marks	Further Information											
1(a)	8 (people)	1												
1(b)		1	Accept inaccuracies in drawing half face provided intention is clear.											
2	66	1												
3	3630 640	1	Both required.											
4	2409	1												
5		1	Allow alternative unambiguous indications of the correct answers.											
6	<table border="1" data-bbox="1074 1261 1121 1736"> <tr> <td>9</td> <td>1</td> <td>3</td> <td>-</td> <td>5</td> <td>8</td> <td>6</td> <td>=</td> <td>3</td> <td>2</td> <td>7</td> </tr> </table> Any 2 boxes correct.	9	1	3	-	5	8	6	=	3	2	7	2	All 3 boxes correct.
9	1	3	-	5	8	6	=	3	2	7				
7	4	B1												
8	Any two from 125 215 305	1												

Question	Answer	Marks	Further Information									
<b>9</b>	$\boxed{-2} \xrightarrow{+17} \boxed{15} \xrightarrow{+17} \boxed{32} \xrightarrow{+17} \boxed{49} \xrightarrow{+17} \boxed{66}$	<b>2</b>	All 3 correct Do not accept 2–									
	Two correct answers or –2 correct.			B1								
<b>10</b>	16.8 (km)	<b>1</b>										
<b>11</b>	–3 (°C)	<b>1</b>	Do not accept 3–									
<b>12</b>	<table border="1"> <thead> <tr> <th></th> <th>multiples of 5</th> <th>not multiples of 5</th> </tr> </thead> <tbody> <tr> <td>square numbers</td> <td>25</td> <td>16 36</td> </tr> <tr> <td>not square numbers</td> <td>20 30</td> <td>27</td> </tr> </tbody> </table>		multiples of 5	not multiples of 5	square numbers	25	16 36	not square numbers	20 30	27	<b>2</b>	All 5 correct.
		multiples of 5	not multiples of 5									
square numbers	25	16 36										
not square numbers	20 30	27										
Two or more correct answers.	B1											

Question	Answer	Marks	Further Information
<b>13(a)</b>		<b>1</b>	Accept any clear indication of correct answer. Shape drawn with vertex at (4, 5) implies correct answer.
<b>13(b)</b>	(6, 3)	<b>1</b>	Do not accept (3, 6) If the point given in (b) forms a trapezium with one line of symmetry with <i>their</i> (a) then award follow through mark. If (a) is plotted incorrectly then do not award (6, 3) for (b).
<b>14</b>	1800 (pens)	<b>1</b>	
<b>15</b>	460 3.5(0) 0.35	<b>1</b>	All three answers must be correct for the award of the mark.
<b>16</b>	14 (hours) 52 (minutes)	<b>1</b>	Do not accept 892 minutes
<b>17(a)</b>	200010	<b>1</b>	
<b>17(b)</b>	999 900	<b>1</b>	

Question	Answer	Marks	Further Information
18(a)	4	1	
18(b)	3	1	
19	<p>Award 2 marks for all 3 joined correctly</p>	2	<p>All 3 correctly joined. Small discrepancy allowed if intention is clear.</p>
20	Two correct answers. 53 (°)	B1	
21	$6.2 + \boxed{3}.\boxed{8} = 10$ $10 - \boxed{5}.\boxed{3} = 4.\boxed{7}$ $7.\boxed{6} + \boxed{2}.\boxed{4} = 10$	2	All 3 calculations must be correct for 2 marks.
22(a)	Any two calculations correct. June, July and August.	B1	
22(b)	April.	1	Accept the months in any order.
23	25 (squares)	1	Do not accept A. Accept any answer between 24 and 26 squares inclusive.
24	6.4	1	

Question	Answer	Marks	Further Information
25		1	Accept any clear indication of correct answer.
26		1	Accept slight inaccuracies in the drawing provided the intention is clear. [Note the grid in the answer booklet extends further to the right]
27	24 (cherries)	1	
28	296 (km)  A correct method containing any number of arithmetic errors: $185 \div 5 \times 8$	2	
29	400    4000    40 000    400 000	1	Accept any clear indication of the correct answer.