

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

Cambridge International General Certificate of Secondary Education

## **MARK SCHEME for the May/June 2015 series**

# **0607 CAMBRIDGE INTERNATIONAL MATHEMATICS**

**0607/12**

Paper 1 (Core), maximum raw mark 40

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### Abbreviations

cao	correct answer only
dep	dependent
FT	follow through after error
isw	ignore subsequent working
oe	or equivalent
SC	Special Case
nfw	not from wrong working
soi	seen or implied

<b>1</b>	<b>(a)</b>	5	<b>1</b>	
	<b>(b)</b>	1	<b>1</b>	
<b>2</b>		1 2 4 8 16	<b>2</b>	<b>B1</b> for 3 or 4 factors in list of maximum 5 numbers
<b>3</b>		1.15	<b>2</b>	<b>M1</b> for $5 - (1.50 + 2.35)$ oe If 0 scored, <b>SC1</b> for 115
<b>4</b>	<b>(a)</b>	$\frac{1}{17}$	<b>1</b>	
	<b>(b)</b>	-2, 1, 6	<b>2</b>	<b>B1</b> for terms increasing by 3 and then 5 or <b>B1</b> for any correct term seen on answer line
<b>5</b>	<b>(a)</b>	6	<b>1</b>	
	<b>(b)</b>	2.5	<b>2</b>	<b>M1</b> for ordered list (6 in correct order) or 2 and 3 identified as either side of the median
	<b>(c)</b>	2.9	<b>2</b>	<b>M1</b> for method for total $\Sigma f$ soi by 29
<b>6</b>	<b>(a)</b>	95	<b>2</b>	<b>M1</b> for $180 - 40 - 55$ or better or $40 + 55$
	<b>(b)</b>	130	<b>1</b>	
		Corresponding	<b>1</b>	
<b>7</b>		560	<b>1</b>	
<b>8</b>	<b>(a)</b>	$3.46 \times 10^2$	<b>1</b>	
	<b>(b)</b>	$2.16 \times 10^{-3}$	<b>1</b>	
<b>9</b>		$\frac{20 + 30}{0.5}$	<b>M1</b>	If 0 scored, <b>SC1</b> for two of 20, 30 or 0.5 seen
		100	<b>A1</b>	
<b>10</b>		Correct shape in correct place.	<b>2</b>	If 0 scored, <b>SC1</b> for correct size & orientation or <b>SC1</b> for 3 or 4 points correct

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<b>11</b>	$x + 4$ final answer	<b>1</b>	
<b>12</b>	$[r = ] \sqrt{\frac{A}{4\pi}}$ or $\frac{\sqrt{A}}{\sqrt{4\pi}}$ oe final answer	<b>2</b>	<b>M1</b> for $[r^2 = ] \frac{A}{4\pi}$ or $\sqrt{A} = \sqrt{4\pi r^2}$ or better
<b>13</b>	Correctly eliminating one variable  $[x = ] 1$ $[y = ] 2$	<b>M1</b>  <b>A1</b> <b>A1</b>	If 0 scored, <b>SC1</b> for correct substitution and evaluation to find the other variable.  <b>SC1</b> if no working shown, but 2 correct answers given.
<b>14 (a)</b>	$A$ correct $B$ correct	<b>1</b> <b>1</b>	
<b>(b)</b>	$-\frac{3}{4}$ oe	<b>2FT</b>	<b>M1</b> for $\frac{\text{rise}}{\text{run}}$ attempted from <i>their</i> points provided <i>their</i> $A$ and $B$ do not have same $y$ co-ordinate
<b>15 (a)</b>	Correct probabilities on branches	<b>1</b>	
<b>(b)</b>	$\frac{1}{25}$	<b>2</b>	<b>M1</b> for $\frac{1}{5} \times \frac{1}{5}$ oe
<b>16 (a)</b>	$E$	<b>1</b>	
<b>(b)</b>	$B$	<b>1</b>	