



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

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**CAMBRIDGE INTERNATIONAL MATHEMATICS**

**0607/11**

Paper 1 (Core)

**October/November 2016**

MARK SCHEME

Maximum Mark: 40

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**Published**

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### Abbreviations

awrt	answers which round to
cao	correct answer only
dep	dependent
FT	follow through after error
isw	ignore subsequent working
oe	or equivalent
SC	Special Case
nfww	not from wrong working
soi	seen or implied

Question	Answer	Mark	Part marks
<b>1</b> (a)	(2, 5)	<b>1</b>	
(b)	Plot at (4, -2)	<b>1</b>	
<b>2</b>	40	<b>1</b>	
<b>3</b>	1, 5, 7, 35 cao	<b>2</b>	<b>B1</b> for 5 <b>and</b> 7 and no incorrect factors
<b>4</b> (a)	$(6 + 3) \times 4 - 12 = 24$	<b>1</b>	
(b)	$6 + 3 \times (4 - 12) = -18$	<b>1</b>	
<b>5</b>	175	<b>1</b>	
<b>6</b>	500	<b>2</b>	<b>B1</b> for 50 <b>or</b> 2.5 seen
<b>7</b> (a)	7200	<b>1</b>	
(b)	0.086	<b>1</b>	
<b>8</b> (a)	80	<b>1</b>	
(b)	7	<b>2</b>	<b>M1</b> for $104 - 20 = 12n$ or better oe
<b>9</b> (a)	2, 16	<b>1</b>	
(b)	2, 6	<b>1</b>	
<b>10</b> (a)	$-3x + 6$ final answer	<b>1</b>	
(b)	$2x(3 - 5y)$ final answer	<b>2</b>	<b>M1</b> for $2(3x - 5xy)$ <b>or</b> $x(6 - 10y)$
<b>11</b>	$[y = ] 3x + 7$	<b>2</b>	<b>M1</b> for $3x + c$ , $c \neq 1$ <b>or</b> for $mx + 7$ , $m \neq 0$
<b>12</b> (a)	Correct triangle (-4, 2), (-4, 4), (-5, 4)	<b>2</b>	<b>B1</b> for reflection in line $x = k$ <b>or</b> $y = -1$
(b)	Rotation	<b>1</b>	
	90° clockwise oe	<b>1</b>	
	[Centre] (0, 0) oe	<b>1</b>	

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Question	Answer	Mark	Part marks
<b>13 (a)</b>	Discrete The data only takes on integer values oe	<b>1</b> <b>1 dep</b>	Dependent on discrete
<b>(b)</b>	Median There is one value which is much larger than the others oe	<b>1</b> <b>1 dep</b>	Dependent on median
<b>14</b>	$\frac{5x}{6}$	<b>2</b>	<b>B1</b> for $\frac{3x}{6}$ <b>or</b> $\frac{2x}{6}$ <b>or</b> common denominator
<b>15</b>	Correct method to eliminate one variable  [x =] 5  [y =] 2	<b>M1</b>  <b>A1</b>  <b>A1</b>	Dependant on the coefficients being the same for one of the variables Correct consistent use of addition or subtraction  If zero scored, <b>SC1</b> for correct substitution <b>and</b> evaluation to find other variable <b>or</b> for no working shown, but 2 correct answers
<b>16 (a)</b>	5 points correct	<b>2</b>	<b>B1</b> for 3 or 4 points correct
<b>(b)</b>	negative	<b>1</b>	
<b>(c)</b>	line with negative gradient passing through mean	<b>1</b>	