

# Square and Cube Numbers - Answers

Key Stage 2: 2003 Paper A

1.

<b>16</b>	<p>Award <b>TWO</b> marks for all three numbers correct as shown:</p> <p>a multiple of 9 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 2px 5px;">2</td><td style="padding: 2px 5px;">7</td></tr></table> <b>OR</b> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 2px 5px;">7</td><td style="padding: 2px 5px;">2</td></tr></table></p> <p>a square number <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 2px 5px;">2</td><td style="padding: 2px 5px;">5</td></tr></table></p> <p>a factor of 96 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 2px 5px;">1</td><td style="padding: 2px 5px;">2</td></tr></table></p> <p>If the answer is incorrect, award <b>ONE</b> mark for two numbers correct.</p>	2	7	7	2	2	5	1	2	<b>Up to 2m</b>	
2	7										
7	2										
2	5										
1	2										

Key Stage 2: 2004 Paper A

1.

<b>12</b>	<p>Award <b>TWO</b> marks for a correct number written in each of the four boxes.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 40%;">even</th> <th style="width: 40%;">not even</th> </tr> </thead> <tbody> <tr> <th style="text-align: left;">a square number</th> <td>0 <b>OR</b> 4 <b>OR</b> 16 <b>OR</b> 36 <b>OR</b> 64</td> <td>1 <b>OR</b> 9 <b>OR</b> 25 <b>OR</b> 49 <b>OR</b> 81</td> </tr> <tr> <th style="text-align: left;">not a square number</th> <td>even <b>AND</b> not square <b>AND</b> less than 100</td> <td>odd <b>AND</b> not square <b>AND</b> less than 100</td> </tr> </tbody> </table> <p>If the answer is incorrect, award <b>ONE</b> mark for three boxes completed correctly.</p>		even	not even	a square number	0 <b>OR</b> 4 <b>OR</b> 16 <b>OR</b> 36 <b>OR</b> 64	1 <b>OR</b> 9 <b>OR</b> 25 <b>OR</b> 49 <b>OR</b> 81	not a square number	even <b>AND</b> not square <b>AND</b> less than 100	odd <b>AND</b> not square <b>AND</b> less than 100	<b>Up to 2m</b>	<i>Accept more than one number in each box, provided all are correct.</i>
	even	not even										
a square number	0 <b>OR</b> 4 <b>OR</b> 16 <b>OR</b> 36 <b>OR</b> 64	1 <b>OR</b> 9 <b>OR</b> 25 <b>OR</b> 49 <b>OR</b> 81										
not a square number	even <b>AND</b> not square <b>AND</b> less than 100	odd <b>AND</b> not square <b>AND</b> less than 100										

Key Stage 2: 2005 Paper A

1.

<b>19</b>	<b>36 AND 9</b>	<b>1m</b>	<i>Numbers may be given in either order.</i>
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Key Stage 2: 2009 Paper B

1.

<b>19</b>	Award <b>TWO</b> marks for all three numbers, as shown: <b>169 AND 196 AND 225</b>	<b>Up to 2m</b>	Accept numbers written in any order.
	If the answer is incorrect, award <b>ONE</b> mark for:	(U1)	All three numbers and no incorrect numbers must be given for the award of <b>TWO</b> marks.
	■ two numbers correct and none incorrect		Accept for <b>TWO</b> marks:
	<b>OR</b>		■ $13^2$ AND $14^2$ AND $15^2$
	■ three numbers correct and one incorrect.		<b>OR</b>
			■ $13 \times 13$ AND $14 \times 14$ AND $15 \times 15$
			Accept for <b>ONE</b> mark:
			<b>13 AND 14 AND 15</b>

Key Stage 2: 2012 Paper B L6

1.

<b>6</b>	1024	<b>1m</b>	✓ $32^2$
			! $32 \times 32$ Condone
			× $32$

Key Stage 2: 2013 Paper B

1.

<b>23</b>	<b>49 AND 81</b> <b>OR</b> <b>121 AND 9</b>	<b>1m</b>	Numbers may be given in either order.
		(U1)	

Key Stage 2: 2016 Paper 1 Arithmetic - Sample

1.

<b>13</b>	16	<b>1m</b>	
<b>Question 13 commentary:</b> Pupils are expected to know the notation for square and cube numbers (5C5d).			

Key Stage 2: 2016 Paper 1 Arithmetic

1.

<b>19</b>	19		<b>1m</b>	
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Key Stage 2: 2018 Paper 1 Arithmetic

1.

<b>8</b>	46		<b>1m</b>	
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Key Stage 2: 2019 Paper 1 Arithmetic

1.

<b>16</b>	27		<b>1m</b>	
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