

# Fractions - Answers

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Key Stage 2: 2003 Paper A

1.

<b>9a</b>	Tom <input type="text" value="4"/> Nadia <input type="text" value="28"/>	<b>1m</b>	
<b>9b</b>	4	<b>1m</b>	

Key Stage 2: 2003 Paper A

2.

<b>18</b>	$\frac{13}{35}$	<b>1m</b> U1	
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Key Stage 2: 2003 Paper A

3.

<b>24</b>	64	<b>1m</b>	
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Key Stage 2: 2003 Paper B

1.

<b>12</b>	Award <b>TWO</b> marks for both fractions correct as shown: $\frac{3}{6}$ OR $\frac{6}{12}$ If the answer is incorrect, award <b>ONE</b> mark for one fraction correct.	<b>Up to 2m</b>	Accept fractions written in either order.
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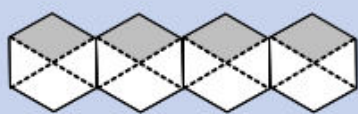
Key Stage 2: 2003 Paper B

2.

<b>19</b>	367.5 OR $367\frac{1}{2}$	<b>1m</b>	
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Key Stage 2: 2003 Paper B

3.

<p><b>23</b></p>	<p>Equivalent of one third of each hexagon shaded, or a total of <math>1\frac{1}{3}</math> hexagons shaded, eg</p> 	<p><b>1m</b></p>	<p><i>Accept part shapes shaded as long as the intention is clear.</i></p> <p><i>Accept inaccuracies in shading provided the intention is clear.</i></p>
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Key Stage 2: 2003 Paper A

1.

<p><b>2</b></p>	<p><math>\frac{1}{4}</math> OR <math>\frac{2}{8}</math></p>	<p><b>1m</b></p>	<p><i>Accept equivalent fractions.</i></p>
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Key Stage 2: 2004 Paper B

1.

<p><b>17a</b></p>	<p><math>1\frac{1}{2}</math> in the first box</p>	<p><b>1m</b></p>	<p><i>Accept equivalent fractions or decimals, eg 1.5</i></p>
<p><b>17b</b></p>	<p><math>2\frac{3}{4}</math> in the second box</p>	<p><b>1m</b></p>	<p><i>Accept equivalent fractions or decimals, eg 2.75</i></p>


Key Stage 2: 2005 Paper A

1.

<p><b>11</b></p>	<p><math>\frac{5}{9}</math></p>	<p><b>1m</b></p>	<p><i>Accept equivalent fractions.</i></p>
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Key Stage 2: 2005 Paper A

2.

<p><b>22</b></p>		<p><b>1m</b></p>	<p><i>Fractions must be written in the correct order for the award of the mark.</i></p> <p><i>Accept equivalent fractions or decimals.</i></p>
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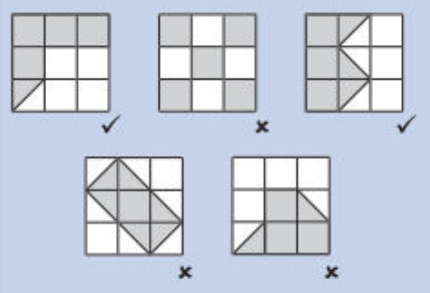
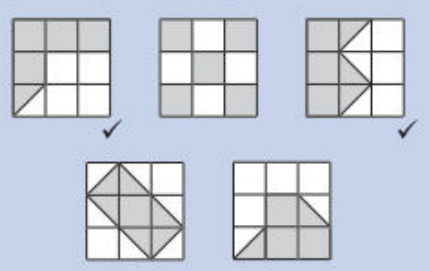
Key Stage 2: 2006 Paper B

1.

<p><b>14</b></p>	<p>£11.25</p>	<p><b>1m</b></p>	
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Key Stage 2: 2007 Paper B

1.

<p><b>8</b></p> <p>Award <b>TWO</b> marks for diagrams ticked or crossed as shown:</p>  <p>If the answer is incorrect, award <b>ONE</b> mark for four diagrams ticked or crossed correctly.</p>	<p><b>Up to 2m</b></p> <p>Accept alternative unambiguous indications such as <b>Y</b> or <b>N</b>.</p> <p>For <b>TWO</b> marks accept:</p> 
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Key Stage 2: 2007 Paper B

2.

<p><b>25</b></p> <p><math>\frac{1}{6}</math></p>	<p><b>1m</b></p> <p>Accept equivalent fractions, eg <math>\frac{4}{24}</math></p>
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Key Stage 2: 2008 Paper A

1.

<p><b>19a</b></p> <p><math>\frac{1}{3}</math></p>	<p><b>1m</b></p> <p>Accept equivalent fractions or decimals.</p>
<p><b>19b</b></p> <p><math>\frac{1}{9}</math></p>	<p><b>1m</b></p> <p>Accept equivalent fractions or decimals.</p> <p style="text-align: center;">(U1)</p>

Key Stage 2: 2008 Paper B

1.

<p><b>10</b></p> <p>Any two squares shaded, eg</p> 	<p><b>1m</b></p> <p>Accept part shapes shaded provided the intention is clear.</p> <p>Accept inaccuracies in shading provided the intention is clear.</p>
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## Key Stage 2: 2009 Paper A

1.

<p>9</p>	<p>Diagram completed correctly as shown:</p> 	<p>1m</p>	<p><b>Do not</b> award the mark if additional incorrect lines are drawn.</p> <p>Lines need not touch the shapes or number line provided the intended accuracy is clear.</p>
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## Key Stage 2: 2009 Paper B

2.

<p>15a</p>	$\frac{3}{8}$	<p>1m</p>	<p>Accept equivalent fractions or decimals.</p>
<p>15b</p>	$\frac{4}{10}$ OR $\frac{2}{5}$	<p>1m</p>	<p>Accept equivalent fractions or decimals.</p>

## Key Stage 2: 2010 Paper A

1.

<p>14</p>	$\left( 1\frac{1}{2} + 3\frac{1}{2} \right) \times 2$ <p>OR</p> $\left( \frac{1}{2} + 3\frac{1}{2} \right) \times 2\frac{1}{2}$	<p>1m</p>	<p>Numbers in brackets may be given in either order.</p> <p>Accept equivalent fractions or decimals.</p> <p><b>Do not</b> accept use of the same card twice, eg</p> $\left( 2\frac{1}{2} + 2\frac{1}{2} \right) \times 2$
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## Key Stage 2: 2010 Paper A

2.

<p>20</p>	<p>Fraction circled as shown:</p> $\frac{7}{8}$ $\frac{2}{5}$ $\frac{1}{3}$ $\frac{5}{8}$ $\frac{3}{6}$	<p>1m</p>	<p>Accept alternative unambiguous indications, eg fraction ticked, crossed or underlined.</p>
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## Key Stage 2: 2010 Paper B

1.

<p>7</p>	<p>An explanation which recognises that 5 is a quarter of 20, the total number of balloons, eg:</p> <ul style="list-style-type: none"> <li>■ <math>\frac{1}{4}</math> are red, <math>\frac{1}{4}</math> are blue and half are yellow'</li> <li>■ 'A quarter of 20 is 5'</li> <li>■ '5 out of 20'</li> <li>■ 'There are 20 balloons altogether and 5 are red so she is correct'.</li> </ul>	<p>1m</p> <p style="text-align: center;">(U1)</p>	<p>No mark is awarded for circling 'Yes' alone.</p> <p><b>Do not</b> accept vague or incomplete explanations, eg:</p> <ul style="list-style-type: none"> <li>■ '5 are red, 5 are blue and 10 are yellow so that is a quarter'</li> <li>■ 'There are 20 altogether'</li> <li>■ 'Add all the balloons up and divide by 4'</li> </ul> <p>If 'No' is circled but a correct, unambiguous explanation is given, then award the mark.</p>
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Key Stage 2: 2010 Paper B

2.

<p><b>11</b></p> <p>Award <b>TWO</b> marks for diagrams ticked or crossed as shown:</p> <p>If the answer is incorrect, award <b>ONE</b> mark for three diagrams ticked or crossed correctly.</p>	<p><b>Up to 2m</b></p> <p>Accept alternative unambiguous indications, eg <b>Y</b> or <b>N</b>.</p> <p>For <b>TWO</b> marks, accept:</p>
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Key Stage 2: 2010 Paper B

3.

<b>20</b>	126	<b>1m</b>	
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Key Stage 2: 2011 Paper A

1.

<p><b>15</b></p> <p>An explanation which recognises that the shaded area is equivalent to one-third, eg:</p> <ul style="list-style-type: none"> <li>■ <math>\frac{2}{6}</math> is shaded and that is equivalent to <math>\frac{1}{3}</math></li> <li>■ '2 out of 6 is the same as 1 out of 3'</li> <li>■ '2 out of 6'</li> <li>■ <math>\frac{2}{6}</math> is shaded and <math>\frac{4}{6}</math> is not shaded, which is the same as <math>\frac{1}{3}</math> shaded and <math>\frac{2}{3}</math> not shaded'</li> <li>■ 'There are 3 squares, and 2 halves are shaded, and 2 halves make one whole'</li> <li>■ 'The two shaded triangles are the same as one square and that is one out of three squares'</li> <li>■ '1 square out of 3'</li> <li>■ 'If you add the shaded parts together it makes one square'</li> </ul>	<p><b>1m</b></p> <p style="text-align: center;">(U1)</p> <p>No mark is awarded for circling 'Yes' alone.</p> <p><b>Do not</b> accept vague or incomplete explanations, eg:</p> <ul style="list-style-type: none"> <li>■ 'It's equivalent to <math>\frac{1}{3}</math>'</li> <li>■ '<math>\frac{1}{3}</math> is shaded and <math>\frac{2}{3}</math> is not shaded'</li> <li>■ 'The two parts shaded add up to <math>\frac{1}{3}</math>'</li> <li>■ 'Half of 2 squares are shaded'.</li> </ul> <p>If 'No' is circled but a correct, unambiguous explanation is given, then award the mark.</p>
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Key Stage 2: 2011 Paper B

1.

<b>8</b>	$\frac{2}{3}$	<b>1m</b>	Accept equivalent fractions or decimals.
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Key Stage 2: 2011 Paper B

2.

11	$\frac{1}{5}$	1m	Accept equivalent fractions, eg $\frac{3}{15}$ Accept 0.2 <b>OR</b> 20%
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Key Stage 2: 2012 Paper A L6


1.

7a	<p>Indicates <b>Yes</b> and gives a correct explanation, eg:</p> <ul style="list-style-type: none"> <li><math>\frac{1}{3} = \frac{3}{9}, \frac{3}{9} &lt; \frac{4}{9}</math></li> <li>  </li> <li><math>\frac{1}{3}</math> of 9 is 3 not 4</li> <li><math>\frac{4}{9}</math> should be <math>\frac{1.333...}{3}</math>, not <math>\frac{1}{3}</math></li> <li><math>0.33... &lt; 0.44...</math></li> <li><math>\frac{1}{3} = \frac{4}{12}, \frac{4}{12} &lt; \frac{4}{9}</math></li> <li><math>\frac{1}{3}</math> of 27 = 9 and <math>\frac{4}{9}</math> of 27 = 12</li> </ul>	1m	<p>✓ <b>Minimally acceptable explanation</b>, eg:</p> <ul style="list-style-type: none"> <li><math>\frac{3}{9}</math></li> <li><math>\frac{9}{27}, \frac{12}{27}</math></li> <li>4 is over a third of 9</li> <li><math>\frac{1}{3}</math> of 9 is 3</li> <li><math>\frac{4}{9}</math> is closer to a half than a third</li> <li>0.33, 0.44</li> <li>It is one ninth bigger</li> <li>If you divide <math>\frac{4}{9}</math> by a <math>\frac{1}{3}</math> you get <math>\frac{4}{3}</math></li> <li><math>\frac{4}{12}</math></li> </ul> <p>! <b>Inaccuracies in diagrams</b> Throughout the question, condone provided the pupil's intention to divide into thirds, ninths and/or eighteenths is clearly shown, and the correct sections are shaded</p> <p>! <b>Indicates No, or no decision made, but explanation clearly correct</b> Condone provided the explanation is more than minimal</p> <p>* <b>Incomplete or incorrect explanation</b>, eg:</p> <ul style="list-style-type: none"> <li>If you draw a pie chart for <math>\frac{4}{9}</math>, more than <math>\frac{1}{3}</math> is shaded</li> <li>Put them into 27ths and <math>\frac{4}{27} &gt; \frac{1}{27}</math></li> <li><math>\frac{1}{3} \times 3 = \frac{3}{9}</math></li> </ul>
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<p><b>7b</b></p>	<p>Indicates <b>No</b> and gives a correct explanation, eg:</p> <ul style="list-style-type: none"> <li>The fractions are equal; if you multiply the numerator and denominator by the same number the fractions are equivalent</li> <li><math>\frac{4}{9} = \frac{8}{18}</math></li> <li><math>\frac{4}{9} \times 2 = \frac{8}{9}</math> not <math>\frac{8}{18}</math></li> <li><math>\frac{8}{18} \div 2 = \frac{4}{18}</math> which is <math>\frac{2}{9}</math> not <math>\frac{4}{9}</math></li> <li>To double the fraction, you don't double the numerator and the denominator, you just double the numerator</li> <li>To halve the fraction, you don't halve the denominator, only the numerator</li> </ul>	<p><b>1m</b></p> <p><b>U1</b></p>	<p>✓ <b>Minimally acceptable explanation</b>, eg:</p> <ul style="list-style-type: none"> <li>Equal</li> <li>Equivalent</li> <li>Same</li> <li><math>\frac{4}{9}</math> is half of <math>\frac{8}{9}</math></li> <li><math>\frac{4}{18}</math> is half of <math>\frac{8}{18}</math></li> <li>You only double the top number</li> <li>You only halve the top number</li> </ul> <p>! <b>Indicates Yes, or no decision made, but explanation clearly correct</b>        Condone provided the explanation is more than minimal</p> <p>✗ <b>Incomplete explanation</b>, eg</p> <ul style="list-style-type: none"> <li>If you double the top and the bottom number of <math>\frac{4}{9}</math>, you get <math>\frac{8}{18}</math></li> </ul>
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Key Stage 2: 2012 Paper A L6

2.

<p><b>14</b></p>	<p>Completes both fractions correctly, ie</p> <div style="text-align: center;">  </div> <p>Completes one of the fractions correctly</p> <p><b>OR</b></p> <p>Shows both correct values, even if they are not fractions in their simplest forms, eg</p> <ul style="list-style-type: none"> <li><math>2\frac{6}{10}</math> and 3.85 seen</li> </ul>	<p><b>2m</b></p> <p><b>or</b></p> <p><b>1m</b></p>	
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Key Stage 2: 2012 Paper A

1.

<p><b>9</b></p>	<p>Diagram completed to show three triangles shaded, or equivalent, eg</p> <div style="text-align: center;">  </div>	<p><b>1m</b></p>	<p>Accept inaccurate shading provided the intention is clear.</p>
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Key Stage 2: 2012 Paper B

1.

<b>4</b>	<p>Award <b>TWO</b> marks for three fractions correct as shown:</p> $\frac{1}{4}$ <p><b>AND</b></p> $\frac{1}{2}$ <p><b>AND</b></p> $\frac{1}{3}$ <p>If the answer is incorrect, award <b>ONE</b> mark for two fractions correct.</p>	<b>Up to 2m</b>	<p>Accept equivalent fractions, eg</p> $\frac{3}{6} \text{ for } \frac{1}{2}$ $\frac{2}{6} \text{ for } \frac{1}{3}$
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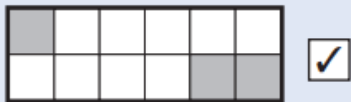
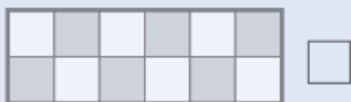
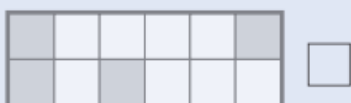
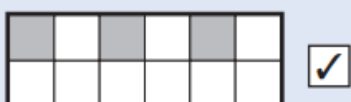
Key Stage 2: 2013 Paper A L6

1.

<b>7</b>	<p><math>\frac{3}{10}</math> or equivalent</p> <p>Shows or implies a complete correct method and no conceptual errors, eg:</p> <ul style="list-style-type: none"> <li>Shaded fraction is <math>\frac{1}{5} + \frac{1}{5} = \frac{2}{5}</math>              Fraction of total white area = <math>1 - \frac{2}{5} = \frac{3}{5}</math>  <math>\frac{3}{5} \div 2</math></li> <li><math>\frac{1}{5} + \frac{1}{5} = 20\% + 20\% = 30\%</math> (error)              White area = 70%              Each white area = 35%</li> </ul>	<b>2m</b>	<p>✓ <b>Equivalent fractions, decimals or percentages</b></p> <p><b>or</b></p> <p><b>1m</b></p> <p>! <b>30 with no % sign</b>              Accept for 1m as evidence of a correct method</p> <p>! <math>\frac{1.5}{5}</math> or <math>\frac{1\frac{1}{2}}{5}</math>              Accept for 1m as evidence of a correct method (incorrect notation for <math>\frac{3}{5} \div 2</math>)</p> <p>x <b>Conceptual errors seen, eg:</b></p> <ul style="list-style-type: none"> <li><math>\frac{1}{5} + \frac{1}{5} = \frac{2}{10}</math></li> <li><math>\frac{1}{5} + \frac{1}{5} = 5\% + 5\% = 10\%</math></li> <li><math>\frac{6}{10} \div 2 = \frac{3}{5}</math></li> </ul>
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Key Stage 2: 2013 Paper A

1.

<b>14</b>	<p>Diagram ticked correctly as shown:</p> <div style="display: flex; align-items: center; margin-bottom: 5px;">  </div> <div style="display: flex; align-items: center; margin-bottom: 5px;">  </div> <div style="display: flex; align-items: center; margin-bottom: 5px;">  </div> <div style="display: flex; align-items: center;">  </div>	<b>1m</b>	<p>Accept alternative unambiguous indications.</p>
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Key Stage 2: 2013 Paper A

2.

<b>20</b>	Award <b>TWO</b> marks for the correct answer of 300  If the answer is incorrect, award <b>ONE</b> mark for evidence of appropriate working, eg $1\frac{1}{2}$ kg = 1500g 1.2 kg = 1200g 1500g – 1200g = wrong answer	<b>Up to 2m</b>	Answer must be in grams for the award of <b>TWO</b> marks.  <b>Do not</b> accept 0.3kg.  Working must be carried through to reach an answer for the award of <b>ONE</b> mark.
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Key Stage 2: 2014 Paper A L6

1.

<b>8a</b>	Gives a pair of numbers to make the calculation correct, eg:  <ul style="list-style-type: none"> <li>• <math>\frac{1}{\boxed{2}} + \frac{\boxed{1}}{5}</math></li> <li>• <math>\frac{1}{\boxed{10}} + \frac{\boxed{3}}{5}</math></li> </ul>	<b>1m</b>	<p>✓ <b>Accept the following</b></p> <ul style="list-style-type: none"> <li>• <math>\frac{1}{\boxed{-10}} + \frac{\boxed{4}}{5}</math></li> <li>• <math>\frac{1}{\boxed{-2}} + \frac{\boxed{6}}{5}</math></li> </ul> <p>✗ <b>Use of non-integers, eg:</b></p> <ul style="list-style-type: none"> <li>• <math>\frac{1}{\boxed{3.33\dots}} + \frac{\boxed{2}}{5}</math></li> </ul>
<b>8b</b>	Gives a <b>different</b> pair of numbers to make the calculation correct	<b>1m</b>	

Key Stage 2: 2014 Paper B L6

1.

<b>8</b>	Gives a correct explanation that converts the given fractions to decimals <b>or</b> fractions with a common denominator / numerator <b>or</b> percentages, eg:  <ul style="list-style-type: none"> <li>• <math>\frac{4}{7} = \frac{36}{63}</math> but <math>\frac{5}{9} = \frac{35}{63}</math></li> <li>• <math>0.57142\dots &gt; 0.55555</math></li> <li>• Because there is a <math>\frac{1}{63}</math> difference between the two</li> </ul>	<b>1m</b>	<p>✓ <b>For <math>\frac{4}{7}</math> accept:</b></p> <ul style="list-style-type: none"> <li>• 0.57(...) <b>or</b> 57( ...%)</li> </ul> <p>✓ <b>For <math>\frac{5}{9}</math> accept:</b></p> <ul style="list-style-type: none"> <li>• 0.56 <b>or</b> 0.55(...) <b>or</b> 56(%) <b>or</b> 55( ...%)</li> </ul> <p>✓ <b>Minimally acceptable explanations, eg:</b></p> <ul style="list-style-type: none"> <li>• <math>\frac{36}{63}</math> <math>\frac{35}{63}</math></li> <li>• 0.56 0.57</li> </ul> <p>✗ <b>Incomplete explanations</b> that fail to convert both fractions to a common format, eg:</p> <ul style="list-style-type: none"> <li>• <math>\frac{4}{7}</math> is 0.57 so it is bigger</li> <li>• 9ths are smaller than 7ths and there is only one more 9th than 7th so <math>\frac{4}{7}</math> is greater</li> </ul> <p>! <b>Condone method of conversion incorrectly expressed in an otherwise correct explanation, eg:</b></p> <ul style="list-style-type: none"> <li>• <math>\frac{4}{7} \times 9 = \frac{36}{63}</math></li> </ul>
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Key Stage 2: 2014 Paper A

1.

6a	C AND E	1m	Letters may be given in either order.
6b	B	1m	

Key Stage 2: 2014 Paper A

2.

18a	$6\frac{1}{4}$	1m	Accept equivalent fractions. <b>Do not</b> accept $5\frac{5}{4}$
18b	$1\frac{1}{2}$	1m	Accept equivalent fractions, eg $1\frac{2}{4}$ , $\frac{3}{2}$ , 1.5, 150%

Key Stage 2: 2015 Paper A L6

1.

10	Sum completed using the correct three cards, ie: $\boxed{\frac{1}{4}} + \boxed{\frac{1}{5}} + \boxed{\frac{1}{20}} = \frac{1}{2}$	1m	! <b>The correct three fractions may be given in any order</b> ✓ <b>Unambiguous indication</b> , eg: • fractions joined to boxes • use of correct equivalent fractions or decimals or percentages which must be linked to the original fraction cards
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Key Stage 2: 2015 Paper B

1.

10a	Any two triangles in the shape shaded.	1m	Accept alternative unambiguous indications.
10b	Any two more triangles in the shape shaded.	1m	Accept alternative unambiguous indications.

Key Stage 2: Paper 1 Arithmetic - Sample

1.

Qu	Requirement	Mark	Additional guidance
2	$\frac{5}{7}$	1 mark	

Key Stage 2: Paper 2 and 3 Reasoning - Sample

1.

Qu	Requirement	Mark	Additional guidance
9	$\frac{5}{12}$	1 mark	

Key Stage 2: 2016 Paper 1 Arithmetic - Sample

1.

<b>10</b>	$\frac{3}{5}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.6
<p><b>Question 10 commentary:</b> As the question is expressed in common fractions, pupils should give their answer as a common fraction. An equivalent fraction such as <math>\frac{6}{10}</math> would also be awarded the mark. Since this fraction does have an exact decimal equivalent, the mark scheme also allows this to be awarded the mark.</p>			

Key Stage 2: 2016 Paper 1 Arithmetic - Sample

2.

<b>19</b>	$\frac{5}{9}$	<b>1m</b>	Accept equivalent fractions or the <b>exact</b> decimal equivalent, e.g. $0.\overline{5}$ (accept any unambiguous indication of the recurring digit).  <b>Do not</b> accept rounded or truncated decimals.
<p><b>Question 19 commentary:</b> This question is also expressed in common fractions and pupils should give their answer as a common fraction. This fraction answer does have a recurring decimal equivalent which would also be creditworthy. However, a decimal answer truncated to 0.5 or rounded to 0.56 for example would not be awarded the mark.</p>			

Key Stage 2: 2016 Paper 1 Arithmetic - Sample

3.

<b>26</b>	$\frac{1}{32}$	<b>1m</b>	Accept equivalent fractions or the <b>exact</b> decimal equivalent, e.g. 0.03125  <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2016 Paper 1 Arithmetic - Sample

4.

<b>30</b>	$25\frac{1}{2}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 25.5
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Key Stage 2: 2016 Paper 1 Arithmetic - Sample

5.

<b>32</b>	$\frac{1}{5}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.2
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Key Stage 2: 2016 Paper 1 Arithmetic - Sample

6.

33	$\frac{19}{20}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.95 <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2016 Paper 1 Arithmetic - Sample

7.

35	$1\frac{5}{8}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 1.625 <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2016 Paper 1 Arithmetic - Sample

8.

36	$\frac{3}{8}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.375 <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2016 Paper 2 Reasoning - Sample

1.

<p><b>4</b> Award <b>TWO</b> marks for four shapes matched correctly as shown:</p> <p>If the answer is incorrect, award <b>ONE</b> mark for three shapes matched correctly.</p>	<p><b>Up to 2m</b></p> <p>Lines need not touch shapes or fraction boxes, provided the intention is clear.</p> <p><b>Do not</b> credit any shape that has been matched to more than one fraction.</p>
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Key Stage 2: 2016 Paper 3 Reasoning - Sample

1.

<p><b>13</b> Award <b>ONE</b> mark for any of the following:</p> <p><math>\frac{7}{16} &lt; \frac{6}{12} &lt; \frac{5}{8}</math></p> <p><b>OR</b></p> <p><math>\frac{7}{16} &lt; \frac{6}{12} &lt; \frac{3}{4}</math></p> <p><b>OR</b></p> <p><math>\frac{7}{16} &lt; \frac{5}{8} &lt; \frac{3}{4}</math></p> <p><b>OR</b></p> <p><math>\frac{6}{12} &lt; \frac{5}{8} &lt; \frac{3}{4}</math></p>	<p><b>1m</b></p> <p>Accept equivalent fractions correctly ordered, e.g.</p> <p><math>\frac{21}{48} &lt; \frac{24}{48} &lt; \frac{30}{48}</math></p> <p><math>\frac{21}{48} &lt; \frac{24}{48} &lt; \frac{36}{48}</math></p> <p><math>\frac{7}{16} &lt; \frac{10}{16} &lt; \frac{12}{16}</math></p> <p><math>\frac{12}{24} &lt; \frac{15}{24} &lt; \frac{18}{24}</math></p>
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Key Stage 2: 2016 Paper 1 Arithmetic

1.

<b>24</b>	$1\frac{2}{7}$ OR $\frac{9}{7}$	<b>1m</b>	Accept equivalent fractions or the <b>exact</b> decimal equivalent, e.g. $1.\overline{285714}$ (accept any unambiguous indication of the recurring digits).  <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2016 Paper 1 Arithmetic

2.

<b>27</b>	$\frac{1}{4}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.25
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Key Stage 2: 2016 Paper 1 Arithmetic

3.

<b>31</b>	$2\frac{1}{10}$ OR $\frac{21}{10}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 2.1  <b>Do not</b> accept $1\frac{11}{10}$
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Key Stage 2: 2016 Paper 1 Arithmetic

4.

<b>33</b>	$\frac{1}{5}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.2
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Key Stage 2: 2016 Paper 1 Arithmetic

5.

<b>34</b>	56	<b>1m</b>	
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Key Stage 2: 2016 Paper 1 Arithmetic

6.

<b>35</b>	$\frac{11}{12}$	<b>1m</b>	Accept equivalent fractions or the <b>exact</b> decimal equivalent e.g. $0.9\overline{16}$ (accept any unambiguous indication of the recurring digit).  <b>Do not</b> accept rounded or truncated decimals.
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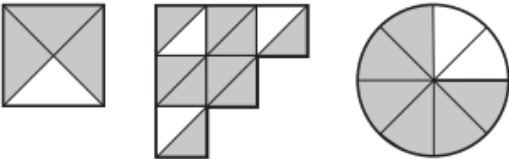
Key Stage 2: 2016 Paper 2 Reasoning

1.

<b>7a</b>	$\frac{2}{3} = \frac{8}{12} = \frac{4}{6}$	<b>1m</b>	
<b>7b</b>		<b>1m</b>	

Key Stage 2: 2016 Paper 2 Reasoning

2.

<b>10</b>	<p>Award <b>TWO</b> marks for all three diagrams completed to show three-quarters shaded, e.g.</p>  <p>If the answer is incorrect, award <b>ONE</b> mark for two diagrams correct.</p>	<b>Up to 2m</b>	Accept alternative unambiguous indications of parts shaded.
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Key Stage 2: 2017 Paper 1 Arithmetic

1.

<b>3</b>	$1\frac{1}{6}$ OR $\frac{7}{6}$	<b>1m</b>	<p>Accept equivalent mixed numbers, fractions or an <b>exact</b> decimal equivalent, e.g. <math>1.1\bar{6}</math> (accept any unambiguous indication of the recurring digit).</p> <p><b>Do not</b> accept rounded or truncated decimals.</p>
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Key Stage 2: 2017 Paper 1 Arithmetic

2.

<b>15</b>	$\frac{2}{5}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. $\frac{12}{30}$ or 0.4
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Key Stage 2: 2017 Paper 1 Arithmetic

3.

<b>23</b>	$\frac{3}{8}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.375
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Key Stage 2: 2017 Paper 1 Arithmetic

4.

26	$\frac{11}{20}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.55
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Key Stage 2: 2017 Paper 1 Arithmetic

5.

27	$\frac{1}{5}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. $\frac{4}{20}$ or 0.2
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Key Stage 2: 2017 Paper 1 Arithmetic

6.

28	$\frac{5}{16}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.3125
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Key Stage 2: 2017 Paper 1 Arithmetic

7.

30	$3\frac{1}{6}$ OR $\frac{19}{6}$	1m	Accept equivalent mixed numbers, fractions or an <b>exact</b> decimal equivalent, e.g. $3.1\bar{6}$ (accept any unambiguous indication of the recurring digit). <b>Do not</b> accept rounded or truncated decimals. <b>Do not</b> accept $2\frac{7}{6}$
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Key Stage 2: 2017 Paper 1 Arithmetic

8.

32	$\frac{5}{24}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. $\frac{10}{48}$ or $0.208\bar{3}$ (accept any unambiguous indication of the recurring digit). <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2017 Paper 1 Arithmetic

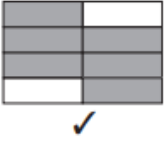
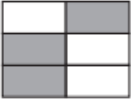
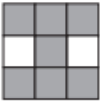

9.

35	$85\frac{1}{2}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent e.g. $\frac{171}{2}$ or 85.5
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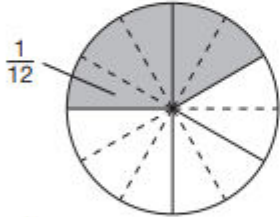
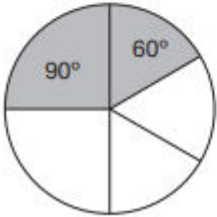


Key Stage 2: 2017 Paper 2 Reasoning

1.

<b>9</b>	Both shapes ticked as shown:    	<b>1m</b> Accept alternative unambiguous positive indications, e.g. shapes circled.
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2.

<p><b>23</b></p>	<p>Award <b>TWO</b> marks for the correct answer of <math>\frac{7}{12}</math></p> <p>If the answer is incorrect, award <b>ONE</b> mark for evidence of an appropriate method, e.g.</p> <ul style="list-style-type: none"> <li>• <math>\frac{1}{4} + \frac{1}{6} =</math> <math>\frac{3}{12} + \frac{2}{12} = \frac{5}{12}</math> <math>1 - \frac{5}{12}</math></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• <math>\frac{1}{4} + \frac{1}{6} + \frac{1}{6}</math></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• <math>1 - \frac{1}{4} - \frac{1}{6}</math></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>•</li> </ul> <div style="text-align: center;">  </div> <p style="text-align: center;"><math>\frac{3}{12} + \frac{4}{12}</math></p> <p>OR</p> <ul style="list-style-type: none"> <li>•</li> </ul> <div style="text-align: center;">  </div> <p style="text-align: center;"><math>90^\circ + 60^\circ = 150^\circ</math></p> <p style="text-align: center;"><math>1 - \frac{150}{360}</math></p>	<p><b>Up to 2m</b></p> <p>Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. <math>0.58\bar{3}</math></p> <p>Accept for <b>ONE</b> mark an answer between 0.58 and 0.59 inclusive.</p> <p>Answer need not be obtained for the award of <b>ONE</b> mark.</p>
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Key Stage 2: 2018 Paper 1 Arithmetic

1.

<b>2</b>	$\frac{5}{11}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. $0.\overline{45}$ (accept any unambiguous indication of the recurring digits). <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2018 Paper 1 Arithmetic

2.

<b>17</b>	$\frac{6}{7}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. $0.\overline{857142}$ (accept any unambiguous indication of the recurring digits). <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2018 Paper 1 Arithmetic

3.

<b>19</b>	750	<b>1m</b>	
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Key Stage 2: 2018 Paper 1 Arithmetic

4.

<b>24</b>	$\frac{7}{10}$	<b>1m</b>	Accept equivalent fractions or the <b>exact</b> decimal equivalent, e.g. 0.7
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Key Stage 2: 2018 Paper 1 Arithmetic

5.

<b>25</b>	$2\frac{1}{2}$	<b>1m</b>	Accept equivalent mixed numbers, fractions or the <b>exact</b> decimal equivalent, e.g. 2.5
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Key Stage 2: 2018 Paper 1 Arithmetic

6.

<b>28</b>	$\frac{2}{3}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. $0.\overline{6}$ (accept any unambiguous indication of the recurring digits). <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2018 Paper 1 Arithmetic

7.

<b>31</b>	$\frac{1}{8}$	<b>1m</b>	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.125
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Key Stage 2: 2018 Paper 1 Arithmetic

8.

<b>33</b>	60	<b>1m</b>	<b>Do not</b> accept unsimplified equivalent fractions unless accompanied by 60 or $\frac{60}{1}$
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Key Stage 2: 2018 Paper 1 Arithmetic

9.

<b>35</b>	$2\frac{17}{21}$ <b>OR</b> $\frac{59}{21}$	<b>1m</b>	Accept equivalent mixed numbers, fractions or the <b>exact</b> decimal equivalent, e.g. 2.809523 (accept any unambiguous indication of the recurring digits).  <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2018 Paper 2 Reasoning

1.

<b>4</b>	Both values correct, as shown:  $\frac{3}{4} = \frac{9}{12} = \frac{18}{24}$	<b>1m</b>	Both values must be correct for the award of <b>ONE</b> mark.
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Key Stage 2: 2018 Paper 2 Reasoning

2.

<b>13</b>	Correct number circled, as shown:  $\frac{67}{8}$ $\frac{48}{8}$ $\frac{62}{8}$ $\frac{55}{8}$ $\frac{76}{8}$	<b>1m</b>	Accept alternative unambiguous positive indication of the correct answer, e.g. fraction ticked.
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Key Stage 2: 2018 Paper 3 Reasoning

1.

<b>16</b>	<p>Award <b>TWO</b> marks for the correct answer of 184</p> <p>If the answer is incorrect, award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"> <li>sight of 92</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>evidence of appropriate method, e.g.</li> <li><math>\frac{1}{3} \times 276 = 92</math></li> <li><math>92 \times 2 =</math></li> <li><math>276 \div 3 = 92</math></li> <li><math>276 - 92 =</math></li> </ul>	<b>Up to 2m</b>	<p>Answer need not be obtained for the award of <b>ONE</b> mark.</p>
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Key Stage 2: 2018 Paper 3 Reasoning

2.

<b>18</b>	<p>Award <b>TWO</b> marks for the correct answer of <math>\frac{1}{12}</math> or an equivalent fraction.</p> <p>If the answer is incorrect, award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"> <li>sight of <math>\frac{11}{12}</math></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>evidence of appropriate method, e.g.</li> <li><math>\frac{2}{3} + \frac{1}{4}</math></li> <li><math>\frac{8}{12} + \frac{3}{12} = \frac{10}{12}</math> (error)</li> <li><math>1 - \frac{10}{12} =</math></li> <li><math>1 - \frac{2}{3} - \frac{1}{4} =</math></li> </ul>	<b>Up to 2m</b>	<p>Answer need not be obtained for the award of <b>ONE</b> mark.</p>
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Key Stage 2: 2019 Paper 1 Arithmetic

1.

<b>22</b>	$\frac{6}{7}$	<b>1m</b>	<p>Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.857142 (accept any unambiguous indication of the recurring digits).</p> <p><b>Do not</b> accept rounded or truncated decimals.</p>
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Key Stage 2: 2019 Paper 1 Arithmetic

2.

24	$\frac{19}{20}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.95
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Key Stage 2: 2019 Paper 1 Arithmetic

3.

26	$3\frac{3}{10}$ OR $\frac{33}{10}$	1m	Accept equivalent mixed numbers, fractions or an <b>exact</b> decimal equivalent, e.g. 3.3
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Key Stage 2: 2019 Paper 1 Arithmetic

4.

28	$\frac{23}{36}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.638 (accept any unambiguous indication of the recurring digits). <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2019 Paper 1 Arithmetic

5.

31	$\frac{2}{9}$	1m	Accept equivalent fractions or an <b>exact</b> decimal equivalent, e.g. 0.2 (accept any unambiguous indication of the recurring digits). <b>Do not</b> accept rounded or truncated decimals.
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Key Stage 2: 2019 Paper 1 Arithmetic

6.

32	$1\frac{3}{4}$ OR $\frac{7}{4}$	1m	Accept equivalent mixed numbers, fractions or an <b>exact</b> decimal equivalent, e.g. 1.75
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Key Stage 2: 2019 Paper 1 Arithmetic

7.

<b>34</b>	$17\frac{1}{2}$  <b>OR</b>  $\frac{70}{4}$ <b>OR</b> $\frac{35}{2}$	<b>1m</b>	Accept equivalent mixed numbers, fractions or an <b>exact</b> decimal equivalent, e.g. 17.5
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Key Stage 2: 2019 Paper 1 Arithmetic

8.

<b>35</b>	450	<b>1m</b>	
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Key Stage 2: 2019 Paper 2 Reasoning

1.

<b>20</b>	Award <b>TWO</b> marks for two boxes ticked correctly, as shown:  $\frac{1}{20}$ <input type="checkbox"/>  $\frac{20}{40}$ <input type="checkbox"/>  $\frac{1}{5}$ <input checked="" type="checkbox"/>  $\frac{3}{15}$ <input checked="" type="checkbox"/>  $\frac{2}{100}$ <input type="checkbox"/>  If the answer is incorrect, award <b>ONE</b> mark for: <ul style="list-style-type: none"> <li>• only one box ticked correctly and no incorrect boxes ticked</li> <li>• two boxes ticked correctly and one incorrect box ticked.</li> </ul>	<b>Up to 2m</b>	Accept alternative unambiguous positive indication of the correct answer, e.g. Y.
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Key Stage 2: 2019 Paper 3 Reasoning

1.

<b>18</b>	<p>Award <b>TWO</b> marks for three boxes ticked correctly, as shown:</p> <p><math>\frac{1}{2}</math> <input checked="" type="checkbox"/></p> <p><math>\frac{2}{8}</math> <input checked="" type="checkbox"/></p> <p><math>\frac{3}{4}</math> <input type="checkbox"/></p> <p><math>\frac{7}{16}</math> <input checked="" type="checkbox"/></p> <p><math>\frac{24}{32}</math> <input type="checkbox"/></p> <p>Award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"><li>• only two boxes ticked correctly and no incorrect boxes ticked</li></ul> <p><b>OR</b></p> <ul style="list-style-type: none"><li>• three boxes ticked correctly and one incorrect box ticked.</li></ul>	<b>Up to 2m</b>	Accept alternative unambiguous positive indication of the correct answer, e.g. Y.
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