

# December Maths Masters

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	<p>1 How many ways can you make £3.72? Are there more than 5 ways?</p>	<p>2 What is the difference between <math>\frac{3}{7}</math> and <math>\frac{1}{8}</math>? How do you know?</p>	<p>3 What is the odd number out and why: 50, 30, 60, 90?</p>	<p>4 What is the product of <math>\frac{4}{7}</math> and 3? Can you draw your working out?</p>	<p>5 What is the product of 341 and 17? What does product mean?</p>	<p>6 <math>392 \times 5 = 1960</math>. How does this help you work out <math>392 \times 50</math>?</p>
<p>7 Write 4 equivalent fractions to <math>\frac{2}{7}</math>.</p>	<p>8 What's next in this sequence: 13, 10, 6, 1, ____. How do you know?</p>	<p>9 Simplify these fractions: <math>\frac{12}{20}</math> <math>\frac{15}{40}</math> <math>\frac{16}{48}</math></p>	<p>10 List all of the prime numbers between 30 and 60.</p>	<p>11 Draw a cuboid. Describe the properties using mathematical vocabulary.</p>	<p>12 Round these numbers to the nearest 10, 100 and 1000: 5096/3987/1670.</p>	<p>13 Can a shape have the same perimeter as area? Prove it.</p>
<p>14 What is the difference between 19474 and 242784?</p>	<p>15 Can you draw the net of a triangular prism?</p>	<p>16 Write these decimals in words and as fractions: 0.53      0.75 0.07      0.25</p>	<p>17 Order these numbers: 0.7, 0.71, 0.07, 0.17. Explain how you did it.</p>	<p>18 If <math>9c + 12 = 84</math>, what is the value of <math>c</math>? What is the value of <math>5c</math>?</p>	<p>19 What is today's date in Roman Numerals? What was yesterday's?</p>	<p>20 What time is 16:07 in words? Can you draw it on a clock face?</p>
<p>21 Put these fractions on a 0-1 number line: <math>\frac{1}{2}</math>    <math>\frac{3}{5}</math>    <math>\frac{1}{3}</math> <math>\frac{3}{4}</math>    <math>\frac{9}{10}</math></p>	<p>22 What's bigger <math>\frac{5}{7}</math> or <math>\frac{7}{5}</math>? How do you know?</p>	<p>23 How many grams are the same as 3.05kg? How do you know?</p>	<p>24 What is the total of 635, 530, 728 and 37? How can you check?</p>	<p>25 Can you name the different kinds of triangle? Can you draw them?</p>	<p>26 If <math>p = 7</math> and <math>r = 12</math>, complete these: <math>s = 2p + r</math> <math>m = (p+r) \times 3</math> <math>f = 7p + 5r</math></p>	<p>27 Jake says, "All of the multiples of 3 are also multiples of 6." Do you agree? Why?</p>
<p>28 Three quarters of a number is 51. What is one quarter? What is the number?</p>	<p>29 What are the multiples of 60? Can you list them all?</p>	<p>30 What is the perimeter of a rectangle which measures 13cm by 7cm? What is its area?</p>	<p>31 <b>TRICKY QUESTION:</b> How many hours have you attended school since September?</p>	<p>Have a go at each of the questions for December. Can you draw your working out? Can you show it using a written method? Can you talk to someone about how you worked out your answers?</p>		