**Year 11 Maths Quick Questions 1 – Second set of new numbers**

Name:

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| Number | Question | Answer | Correction |
| 1 | Write 1897 to the nearest 1000 | 2000 |  |
| 2 | What is the value of the 6 in the number 376,500? | 6,000 |  |
| 3 | Write 23% as a fraction | 23/100 |  |
| 4 | Write 0.92 as a percentage | 92% |  |
| 5 | Write 82% as a fraction in its lowest terms | 41/50 |  |
| 6 | 0.5 x 0.1 | 0.05 |  |
| 7 | How many cm in 3.4m | 340cm |  |
| 8 | How many g in 5.3 Kg | 5300g |  |
| 9 | Change 10cm into mm | 100mm |  |
| 10 | How many minutes is 4hrs 15 minutes | 255mins |  |
| 11 | How many seconds is 2 minutes and 10 seconds | 130seconds |  |
| 12 | What is 4 cubed | 64 |  |
| 13 | What is 13 squared | 169 |  |
| 14 | 24 | 16 |  |
| 15 | 103 | 1000 |  |
| 16 | What is the square root of 100 | 10 |  |
| 17 | What is the cube root of 1 | 1 |  |
| 18 | 8 + 9 x 3  | 35 |  |
| 19 | 15 + 60 ÷ 10 | 21 |  |
| 20 | Write 12/18 as a fraction in its simplest form | 2/3 |  |
| 21 | Which is the smallest (0.621, 0.035 or 0.299) | 0.035, 0.299, 0.621 |  |
| 22 | What is the range of theses numbers (7,2,2,12,21) | 19 |  |
| 23 | What is the mode of these numbers (5,4,5,4,3,5,7,9,5) | 5 |  |
| 24 | Work out the mean (9,10,7,7,7) | 8 |  |
| 25 | From the numbers (3,4,6,8,9) John picks one number. What is the probability that it is an even number? | 3/5 |  |
| 26 | Write the prime numbers between 30 and 40 | 31, 37 |  |
| 27 | Three angles meet at a point. Two of them are 130 and 190. What size is the third angle? | 40 |  |
| 28 | Solve 6x = 12 | X=2 |  |
| 29 | Solve x – 9 = 2 | X=11 |  |
| 30 | Solve 7x – 10 = 11 | X=3 |  |
| 31 | Solve x2 = 144 | X = 12 or x = -12 |  |
| 32 | John buys 2 Mars bars costing 82p each. He also buys 3 packets of crisps costing 45p each. How much change will he get from a 10 pound note? | £7.01 |  |
| 33 | A map has a scale of 1:6000. The length of a road on the map is 18cm. Work out the real length of the road. Give your answer in cm and then also in Km. | 108,000cm1.08km |  |
| 34 | John is twice as old as Mike. Mike is twice as old as Ann. If their combined age is 84. How old is John? | 48 |  |
| 35 | Write 112 as a product of its prime factors. | 2x2x2x2x7 |  |
| 36 | The probability of passing a test is 0.65. What is the probability of not passing the test? | 0.35 |  |
| 37 | What is the probability of rolling a 4 when you roll a normal die | 1/6 |  |
| 38 | When I spin a spinner the probability of getting blue is 0.6. Estimate how many times I would get blue if I spun the spinner 50 times. | 30 |  |
| 39 | Find the Area of a Circle with radius 5cm | $$25πcm^{2} or 78.5cm^{2}$$ |  |
| 40 | What is the Circumference of a circle with radius 10cm? | $$20πcm or 31.4cm$$ |  |
| 41 | **Estimate** 93 x 84 x 0.46 | 3600 |  |
| 42 | Write down 0.7 as a percentage | 70 |  |
| 43 | What is the first even multiple of 13? | 26 |  |
| 44 | What is the first prime number? | 2 |  |
| 45 | Calculate 25% of 60 | 15 |  |
| 46 | Increase 800 by 10% | 880 |  |
| 47 | Reduce 350 by 20% | 280 |  |
| 48 | Simplify the ratio 50:10 | 5:1 |  |
| 49 | Mike thinks of a number. He doubles it and then subtracts 6. The result is 12. What number did Mike think of? | 9 |  |
| 50 | Solve 4a = 12 | a=3 |  |
| 51 | Solve 3y + 7 = 37 | y=10 |  |
| 52 | W = 5p - tFind the value of W when p = 4 and t = -3 | 23 |  |
| 53 | Which is greater 50% of 50 or 29% of 80?You must show all of your workings | 50% of 50 25>23.2 |  |
| 54 | Divide 4800 in the ratio of 4:3:1 | 2400:1800:600 |  |
| 55 | Write 2.3 x 103 in ordinary form  | 2300 |  |
| 56 | Write 0.000021 in standard form | $$2.1×10^{5}$$ |  |
| 57 | Write 6% as a decimal | 0.06 |  |
| 58 | Change 2.5 litres into millilitres | 2500ml |  |
| 59 | Write 2874 to the nearest 100 | 2870 |  |
| 60 | A film starts at 12:30. The film lasts 155 minutes. What time will the film end? | 15:05 |  |
| 61 | Simplify 2n + n + n + n – 2n | 3n |  |
| 62 | Simplify 2a – 4b – a + 6b | a+2b |  |
| 63 | Simplify 2x3  - x3 | $$x^{3}$$ |  |
| 64 | Simplify y8 x y-5 | $$y^{3}$$ |  |
| 65 | Factorize 9x + 18 | 3(3x+6) |  |
| 66 | Factorize 21a2b + 7ab2 | 7ab(3a+b) |  |
| 67 | Expand and simplify (x + 8)(x-4) | $$x^{2}+4x-32$$ |  |
| 68 | What are the prime numbers between 0 and 10? | 2, 3, 5, 7 |  |
| 69 | What are the factors of 20 | 1, 2, 4, 5, 10, 20  |  |
| 70 | Write the first 5 multiples of 12 | 12, 24, 36, 48, 60  |  |
| 71 | What is the nth term of this sequence 3,9,15,21,27 | 6n-3 |  |
| 72 | 60% of the students in a class are boys. If there are 16 girls how many people in the class in total? | 40 |  |
| 73 | What is 185minutes after 6.30am | 9.35 |  |
| 74 | What is the area of a square with side length 5cm? | $$25cm^{2}$$ |  |
| 75 | A square has an area of 49m2. What is its perimeter? | 28cm |  |
| 76 | write 5.16 to 1 decimal place | 5.2 |  |
| 77 | 83.9 x 100 | 8390 |  |
| 78 | 4 bricks weigh a total of 5kg. 3 of the bricks weigh 900g each. How much does the 4th brick weigh? | 2300g |  |
| 79 | A = (1,4) B = (5, 10) What is the coordinate of point C the mid-point of AB | (3,7) |  |
| 80 | 3a x 8b | 24ab |  |
| 81 | If x-2=5 Find 3x2 | x=7147 |  |
| 82 | What is the Lowest Common Multiple of 12 and 15 | 60 |  |
| 83 | (p6)2 | $$p^{12}$$ |  |
| 84 | (2p2)3 | $8p^{6}$  |  |
| 85 | A car is travelling at an average speed of 32km/h for 120 minutes. How far will it travel? | 64 |  |
| 86 | A car travels for 3hrs. It covers a distance of 150miles. What is it’s average speed? | 50mph |  |
| 87 | 0.35 as a percentage | 35% |  |
| 88 | 0.8 as a fraction in simplest form | 4/5 |  |
| 89 | John has 30 sweets. He gives 12 to Mary. What fraction does he keep? | 18/30 |  |
| 90 | 4 numbers have a mean of 11.Three for the numbers are 12, 10 and 8.What is the 4th number? | 14 |  |
| 91 | Jack buys a car for £5000. He later sells it for £4000. Calculate his percentage loss. | 20% |  |
| 92 | What is half way between -4 and 10 | 3 |  |
| 93 | What is half way between 0.5 and 0.8 | 0.65 |  |
| 94 | A car park costs £0.072p per minute. If Jack parks his car for 2 hours, how much will it cost? | 8.64 |  |
| 95 | Shop A – 6 apples for £6.30Shop B – 8 apples for £4.16Which shop is better value. (Must show workings) | £1.050.52Shop B  |  |
| 96 | A bus is 15.4m long. Mike buys a scale model of the bus. The scale of the model is 1:20. How long in cm is the model? | 77cm |  |
| 97 | Cube root of 64 | 4 |  |
| 98 | Nth term = n2+4. What are the first 4 terms. | 5,8,13,20 |  |
| 99 | Find the volume of a cuboid that is 3cm x 6cm x 5cm | $$90cm^{3}$$ |  |
| 100 | Liam runs the 100m in 13sec (to the nearest second). What is the lower bound (Fastest time he could have run it)? | 12.5seconds |  |