**Year 11 Maths Quick Questions**

Name:

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| Number | Question | Answer | Correction |
| 1 | Change 58cm into metres | 0.58 |  |
| 2 | Simplify 7f + f – 3f | 5f |  |
| 3 | Write down the value of 7 in the number 4715 | 700 |  |
| 4 | Write these numbers in order of size,0.614, 3/5, 63%, 0.62  | 3/5, 0.614, 0.62, 63% |  |
| 5 | How much change would you get from £20 if you spent £5.78 | £14.22 |  |
| 6 | Find the nth term of 13, 19, 25, 31 | 6n + 7 |  |
| 7 | Find the nth term of 3, -2, -7, -12, -17 |  |  |
| 8 | What is the 100th term of 4n + 5 | 405 |  |
| 9 | What is the temperature if it is 15 degrees hotter than -7 degrees | 8 degrees |  |
| 10 | 230 – 100 x 2 | 30 |  |
| 11 | $$\frac{2}{5}+\frac{4}{9}$$ | 38/45 |  |
| 12 | $\frac{4}{15}+\frac{7}{30}$ Leave your answer as simplified as possible | 15/30 = ½  |  |
| 13 | $$\frac{8}{9}÷\frac{3}{4} Leave answer as a mixed number$$ | $$\frac{32}{27} = 1\frac{5}{27}$$ |  |
| 14 | 17 sweets in a jar, red or blue. 6 red. What is probability of picking a blue | 11/17 |  |
| 15 | A = 7b + 4c What is A when b=5 and c=2 | 43 |  |
| 16 | A = 7b + 4c What is A when b=5 and c=-3 | 23 |  |
| 17 | Estimate 329 x 4.78 | 1500 |  |
| 18 | Speed = 20 mph, Time = 4 hours. Distance = ?  | 80m |  |
| 19 | 80 grams of butter is used to make 10 scones. How many grams of butter is need for 15 scones | 120 |  |
| 20 | Find 20% of 600 | 12 |  |
| 21 | Decrease 80 by 20% | 64 |  |
| 22 | What is area of a circle with radius 9cm. Leave your answer in terms of pi | $$81π$$ |  |
| 23 | Solve 4x – 9 = 27 | X = 9  |  |
| 24 | Solve 4x – 9 < 27 | X < 9  |  |
| 25 | Write 270 as a product of primes | $$2×3^{3}×5$$ |  |
| 26 | Share 150 in the ratio 3:7 | 45:105 |  |
| 27 | Find 3/8 of 72 | 27 |  |
| 28 | Write $2.34×10^{5}$ as a normal number | 234,000 |  |
| 29 | Write 0.00532 in standard form | $$5.32×10^{-3}$$ |  |
| 30 | $$y=x^{2}+6x-2 What is y when x is 3$$ | 25 |  |
| 31 | What is the value of cos 60 | ½  |  |
| 32 | Round 573 to the nearest 10 | 570 |  |
| 33 | What is the mode of 5,6,4,3,5,4,7,6,5,2,5,3 | 5 |  |
| 34 | Write 0.7 as a percentage | 70% |  |
| 35 | Write down 3 factors of 20 | 1,2,4,5,10,20 |  |
| 36 | What do you call a shape with 8 sides | Octagon |  |
| 37 | Use the bus-stop method to work out $1734÷5$ | 342.8 |  |
| 38 | 2 angles in a triangle are 75 and 34, what is the other angle in the triangle | 71 |  |
| 39 | Simplify $y^{5}×y^{8}$ | $$y^{13}$$ |  |
| 40 | Simplify 4(x+7) + 3(5x – 2) | 19x + 22 |  |
| 41 | Simplify 4(x+7) – 3(5x – 2) | -11x +34 |  |
| 42 | Factorise $30x^{2}-10x$ | 10x(x-1) |  |
| 43 | 6 x $\frac{3}{5}$ | $$\frac{18}{5}=3\frac{3}{5}$$ |  |
| 44 | Find $\sqrt{1.96} on a calculator$ | 1.4 |  |
| 45 | Sketch a triangular prism |  |  |
| 46 | How many faces does a triangular prism have | 5 |  |
| 47 | How many edges does a triangular prism have | 9 |  |
| 48 | How many vertices does a triangular prism have | 6 |  |
| 49 | Solve 3x = 15 | X = 5 |  |
| 50 | Solve $\frac{x}{3}$ = 15 | X = 45 |  |
| 51 | Write 97634 to 2 significant figures | 98000 |  |
| 52 | Write down any 3 angles that *could* be the 3 angles of an isosceles triangle | 50, 50, 80….As long as two are equal and the sum is 180.  |  |
| 53 | Write 24 as a product of primes | $$2^{3}×3 $$ |  |
| 54 | Write 54 as a product of primes | $$2×3^{3}$$ |  |
| 55 | What is the Highest Common Factor of 24 and 54 | 6 |  |
| 56 | A right angled triangle has lengths 5 and 9. Use Pythagoras to find the length of the longest side | $\sqrt{106}$ = 10.3 |  |
| 57 | Write 13/20 as a percentage | 65% |  |
| 58 | Alan and Bob share some money in ratio 5:3 Alan gets £10 MORE than Bob. How much do they each get | Alan 25 Bob 15 |  |
| 59 | Change 42cm into mm | 420mm |  |
| 60 | $$1\frac{1}{2}-\frac{2}{3}$$ | 5/6 |  |
| 61 | Work out 3.56 x 2.3 | 8.188 |  |
| 62 | Expand (x+7)(x+3) | $$x^{2}+10x+21$$ |  |
| 63 | Expand (x+7)(x-3) | $$x^{2}+4x-21$$ |  |
| 64 | Write down 3 square numbers bigger than 50 | 64, 81, 100… |  |
| 65 | Write down 3 prime numbers bigger than 20 | 23, 29, 31 |  |
| 66 | Simplify 14/70  | 1/5 |  |
| 67 | Factorise $x^{2}+12x+35$ | (x+7)(x+5) |  |
| 68 | Add 115 minutes to 2:30pm | 4:25pm |  |
| 69 | 5 x a x 4 x b x b | $$20ab^{2}$$ |  |
| 70 | Simplify 3a + 6b – 7a + 5b | -4a + 11b |  |
| 71 | I have £10 to spend on bottles. Each bottle is 60p. How many bottles can I buy | 16 Bottles |  |
| 72 | I measure all the angles about a point. My results are 23, 125, 34, 195. Why can this not be true | Doesn’t add up to 360. |  |
| 73 | Solve 2(3x+4) = 28 | 10/3 or 3.33333… |  |
| 74 | A triangle has base 10cm and a height 6cm. What is the area? Include units | $$30cm^{2}$$ |  |
| 75 | A square has a perimeter of 20cm. What is its area? | $$25cm^{2}$$ |  |
| 76 | write 4.785 to 2 decimal places | 4.79 |  |
| 77 | 51.4 x 100 | 5140 |  |
| 78 | 48900 divided by 1000 | 489 |  |
| 79 | Probability of getting an even number on a normal dice | 1/2 |  |
| 80 | Probability of getting the number 3 on a normal dice | 1/6 |  |
| 81 | Probability of getting the number 7 on a normal dice | 0 |  |
| 82 | $$g^{6}÷g^{2}$$ | $$g^{4}$$ |  |
| 83 | $$g^{6}÷g^{-2}$$ | $$g^{8}$$ |  |
| 84 | What is the average height of an adult male | 1.7m or 170cm  |  |
| 85 | 6 pens cost £2.10, how much do 11 pens cost | £3.85 |  |
| 86 | $$-3\leq x<1 $$$$ Write down all the integers that x can be$$ | -3, -2, -1,0 |  |
| 87 | What is the gradient of y = 5x - 8 | 5 |  |
| 88 | What is the y-intercept of y = 5x - 8 | -8 |  |
| 89 | $$m^{4}+m^{4}$$ | $$2m^{4}$$ |  |
| 90 | I have 120 20p coins and 150 50p coins. How much money do I have? | £99 |  |
| 91 | Probability it rains tomorrow is 0.23. What is the probability it does NOT rain? | 0.77 |  |
| 92 | 3 angles are on a straight line. One angle is 50 degress. The other two angles are the same. What is one of these other 2 angles | 155 |  |
| 93 | Y=$3n^{2} What is Y when n=4$ | 48 |  |
| 94 | 1 fifth of a number is 12. What is the original number? | 60 |  |
| 95 | Starter could be Salad or MelonMain meal could be Chicken or FishList all the options of a possible starter-main combo | (S,C) (S,F) (M,C) (M,F) |  |
| 96 | A wardrobe cost £300. Bob pays a £120 deposit, then pays the rest in 6 equal instalments. How much is each instalment? | £30 |  |
| 97 | Cube root of 125 | 5 |  |
| 98 | Volume of a cube with a length 4 | $$64cm^{3}$$ |  |
| 99 | Surface area of a cuboid measuring 3cm by 5cm by 2cm | $$62cm^{2}$$ |  |
| 100 | 4,7,3,6,9,5 What is the median | 5.5 |  |