A LITTLE BIT OF MATHS EVERY DAY ...

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1 What is 12 divided by 0.2? $\frac{12}{0.2} \times \frac{10}{10} = \frac{120}{20} = 6$	**2** If I earn £60 for 8 hours work. what is my hourly rate of pay? $60 \div 8$ $8\overline{)60.0}$ £7.50	**3** Work out 23.7 – 2.5 x 8 without a calculator $2.5 \times 8 = 20$ $23.7 - 20 = 3.7$	**4** Write 0.000604 in standard form 6.04×10^{-4}	**5** What is 150.000 less than 10 million? 9,850,000	**6** A = x, S = 2x, M = 2x+9 $\begin{cases} 5x+9=94 \\ 5x=85 \quad x=17 \end{cases}$ Sarah is twice as old as Andy. Mel is nine years older than Sarah. The total of their ages is 94. How old is Mel? $2 \times 17 + 9 = \underline{33}$ **7**
8 Evaluate 27^0 **1**	**9** Alfie. Billy & Charlie share some money in the ratio 2 : 3 : 5. Charlie got £75 more than Alfie How much money did Billy get? £75	**10** Expand $5x^{-4}y^2(3x^2 + 4x^3y)$ $15x^{-2}y^2 + 20x^{-1}y^3$	**11** List the first four triangular numbers $\therefore$ 1 3 6 10	**12** Calculate 0.17 x 6000 $17 \times 6 = 102$ $17 \times 6000 = 102,000$ $0.17 \times 6000 = 1020$	**13** It is a square! Work out the shaded area. Square = $81\,cm^2$ ① = $\frac{9 \times 5}{2} = 22.5$ ② = $\frac{6 \times 9}{2} = 27$ shaded = $81 - (22.5 + 27)$ 31.5cm $31.5\,cm^2$	**14**
15 Work out 63 $25.8 + 12.6 \div 2$ without a calculator $\frac{25.8}{32.1} \quad \frac{6.3}{}$ 32.1	**16** Andrew and Ruby have saved a total of £458 for their holiday. Andrew saved £72 more than Ruby. How much did Andrew save? $458 - 72 = 386$ $386 \div 2 = 193$ $193 + 72 = £265$	**17** What is 100.000 less than 5 million? 4,900,000	**18** $\begin{array}{cccccc} 6 & 9 & 11 & 12 & 14 & 14 & 15 \\ 6 & 11 & 14 & 14 & 15 & 12 & 9 \end{array}$ From the above list. find: – the median 12 $81 \div 7$ – the mean 11.57 (2dp)	**19** How many 20p coins make up £1500? £1 = 5coins 1500 = 7500	**20** Helen buys 10 boxes of drinks. The cost of each box of drinks is £5. Each box holds 12 cans of drink. £50 120cans Helen sells two thirds of the cans for 60p each. 80 x 60 She then sells all the remaining cans for 30p each. £48 40 x 30 = £12 How much profit does Helen make? $(48+12) - 50 = £10$	**21**
22 Calculate 147 x £2.36 without a calculator £346.92	**23** Work out 0.002 x 2..4 without a calculator 0.0042	**24** Write down the first 4 terms of the sequence $1^2 - 10 \quad 2^2 - 10 \quad 3^2 - 10$ $4^2 - 10$ $n^2 - 10$ -9, -6, -1, 6	**25** Solve $4p - 2 = 16$ = 4.5	**26** Solve. $7y > 5y - 2$ $2y > -2$ $y > -1$	**27** $\pi \times 4^2 = 50.24\,cm^2$ What is the total area that is shaded?	**28**
29 Express 96 as a product of its prime factors. $2^5 \times 3$	**30** Work out 22.5% of £1100 without a calculator £247.5	**31** Write 54. 0000 in standard form 5.4×10^5		**AUGUST 2016** **REMEMBER:** THE BEST WAY TO REVISE MATHS IS TO "DO MATHS"!		