MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
	# MARCH 2019			**1** Calculate: $1\frac{2}{5} \div \frac{3}{4} = \frac{13}{15}$	**2** I travel from "A" to "B" at an average speed of 50 mph. I then travel from "B" to "C", which is 210 miles at an average speed of 70 mph. My total journey time is 5 hours. What is my average speed for the total distance travelled from "A" to "C"? $310 \div 5 = 62$ mph. A→B 50mph 100miles 2hours / B→C 70mph 210miles 3hours / A→C 310miles 5hours	**3**
4 Factorise fully $4ab + 12a^2b^2$ $4ab(1 + 3ab)$	**5** Work out the value of $(3 \times 10^8) \div (6 \times 10^7)$ $\frac{3 \times 10^8}{6 \times 10^7} = 0.5 \times 10^1 = 5$	**6** Solve $2x^3 = 128$ $x^3 = 64$ $x = 4$	**7** Write these in size order - from smallest to largest $2^5 \quad 4^3 \quad \frac{16}{64} = 1 \quad 1^6 = 1$ $2^5 \quad 4^3 \quad 1^6 \quad 64^0$	**8** Simplify fully $\frac{m^{0.5} \times m^6}{m^3}$ $m^{3.5}$	**9** A TV is reduced by 30% in a sale. ← 70% The sale price of the television is £350 Work out the normal price of the television. £500	**10**
11 Robert has a biased coin; the probability that the coin will land on heads is 0.6. What is the probability of flipping the coin three times and getting a tails all three times? $0.4 \times 0.4 \times 0.4 = 0.064$	**12** Without a calculator, work out: 349×54 18846	**13** I invest some money in account that pays compound interest of 5% per annum. How many years does it take to double my money? 9 years	**14** List all the factors of 32 $1, 2, 4, 8, 16, 32$	**15** What is the value of n? $23 \times 2n = 29$ $n = 3$	**16** An adult meal costs £4.50 and a childs meal costs £2.75 $84 \times 4.50 = 378$ £2.75 $378 + 115.50$ $42 \times 2.75 = 115.50$ $= 493.50$ Will £500 be enough to pay for meals for 84 adults and 42 children? yes £493.50 < £500	**17**
18 Simplify $2a^2 + 2(3a - 5)$ $2a^2 + 6a - 10$	**19** Draw a venn diagram representing the below: E = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10} A = {even numbers} B = {multiples of 3} 369	**20** Calculate: $3\frac{3}{5} \times 2\frac{1}{7}$	**21** Expand and simplify $(x + 4)(x - 6)$ $x^2 - 2x - 24$ $4xy(2x + 3y)$ $8x^2y + 12xy^2$	**22** The length, L cm, of a pencil is measured as 17cm correct to the nearest centimetre. What is the error interval of L? $16.5 \leqslant L < 17.5$	**23** 18 Adam thinks of a number. 18 He divides his number by 6 ÷6 = 3 He then adds 13 +13 = 16 His answer is 16 ✓ What number did Adam first think of? 16	**24**
25 Expand & simplify $3x^2 + 6xy + xy + 2y^2$ $(3x + y)(x + 2y)$ $3x^2 + 7xy + 2y^2$	**26** oops! Simplify $4e + 6f + 3e - 2f$ $7e + 4f$	**27** Lois and Robert share a sum of money in the ratio 2 : 5 Lois has £45 more than Robert. How much does Robert have? £75 $30 : 75$	**28** Estimate $\frac{6.8 \times 191}{0.051}$ $\frac{7 \times 200}{0.05}$ 28000	**29** Find the fourth term of this quadratic sequence: $16 + 12 - 2$ $n^2 + 3n - 2$ $= 2$	**30** A box is on a table. The area of the box in contact with the table is 1500cm². The pressure on the table is 28 newtons/m². Work out the force exerted by the box on the table. $\rho = \frac{F}{A}$ $F = P \times A = 28 \times 0.015 = 0.42N$	**31**

REMEMBER: THE BEST WAY TO REVISE MATHS IS TO "DO MATHS"!

1500cm² ÷ 10 ⟶ [15cm box] = 0.1 × 0.15 = 0.015m²