

TWO-WEEK HOLIDAY CHALLENGE (F)

How many can you do? ... How many **WILL** you do?

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
What is 72 written as a product of prime factors?	What is $\frac{3}{4}$ written as a percentage?	If I spend £18.20 how much change from £20 will I get?	Calculate: $\frac{3}{8} \times \frac{2}{5}$	What is 15% of 84?	Write 68000 in standard form	Write the ratio 6:8 in its simplest form
Calculate 4^3	What is 50% of 80?	What is "one fifth" written as a decimal?	Without a calculator: $1242 - 897$	Calculate: $\frac{1}{2} \div \frac{1}{4}$	Calculate 2.5% of 80	Write 0.00501 in standard form
What is : $1237 + 649$?	Calculate 2^5	What is 10% of 80?	What is 40% written as a fraction?	I share £525 between 5 friends. How much do they each receive?	Calculate: $\frac{5}{8} + \frac{1}{5}$	Work out 17.5% of 120
Solve : $4x + 3 = 19$	What is 150 less than 5 million?	Calculate 1^5	What is 5% of 40?	What is $\frac{2}{5}$ written as a percentage?	Tea costs £1.40 and coffee costs 65p how much will 4 coffees and 3 teas cost?	Calculate: $\frac{3}{7} - \frac{1}{9}$
Simplify $7 \times a \times 8 \times b$	Calculate 12×46	Round 3.1789 to 2 decimal places	Simplify: $x^2 \times x^4$	What is $-4 + 7$?	Expand and simplify $2(x + 3) + 3(x + 5)$	Share £60 in the ratio 1:4
Share £45 in the ratio 4:5	What is $12.45 + 0.3$?	work out 327×11	Round 124.7735 to 3 significant figures	Simplify: $x^3 \div x^2$	What is -4×8 ?	Expand and simplify $(x + 3)(x + 6)$

DAY 8	DAY 9	DAY 10	DAY 11	DAY 12	DAY 13	DAY 14
Write 1.64×10^5 as an ordinary number	Friends A, B and C share some sweets in the ratio 2:3:5. C has 6 more sweets than B. How many sweets altogether?	What is $3256 + 11.45$?	work out 4.34×12	Round 405.05 to 1 significant figure	Simplify: $x^3 \div x^7$	What is $-3 - 8$?
Work out 22.5% of 180	Write 3.054×10^{-5} as an ordinary number	There are 7 blue pens and 2 red pens. What fraction of the pens are red?	What is 3.8 million + 142?	What is 0.2×0.3 ?	x is rounded to 6400 which is 1 sig. fig. What is the error interval?	Simplify: $(x^5)^3$
List the first 6 prime numbers	Factorise $5x + 10$	Increase £370 by 20%	A letter is chosen from the word: PROBABILITY. What is the probability of choosing the letter "E"?	Solve : $3x - 7 = 8$	Without a calculator: 54.3×4.7	What is 84 written as a product of prime factors?
Share £18 in the ratio 9:3	What is the 4th square number PLUS the 7th prime number?	Factorise $3x^2y + 9xy^2$	A bank pays 4% simple interest. £2000 is invested, how much interest is earned over 2 years?	1 3 4 2 4 3 6 5 3 What is the mode and range?	Solve : $3(2x - 3) = 21$	What is the area of a rectangle with sides 5cm and 2.5cm?
Expand and simplify $(x + 3)(x - 5)$	The ratio of pens:pencils is 3 : 5 The ratio of pens:rulers is 8 : 1 What is the ratio of pencils : rulers ?	What is the Highest Common Factor of 12 and 20??	Factorise $2a^2b + 8ab^2 + 6$	$a = 4$ $b = -3$ What is the value of $3a + 2b$?	What is the value of 27^0 ?	Solve : $4(2x + 3) = 24$
True or False? $-4 - -3 = -7$	Expand and simplify $(x - 2)(x + 7)$	What is the area of a square with side length of 6cm?	What is the lowest common multiple of 18 and 24?	Factorise $x^2 + 7x + 10$	Simplify $10 + 2a + 5b - 7a + b$	The probability it will snow tomorrow is 0.05. What is the probability that it won't snow?

ANSWERS

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
$2^3 \times 3^2$	75%	£1.80	$\frac{6}{40}$ or $\frac{3}{20}$	12.6	6.8×10^4	3 : 4
64	40	0.2	345	2	2	5.01×10^{-3}
1886	32	8	$\frac{40}{100}$ or $\frac{20}{50}$ or $\frac{10}{25}$ or $\frac{4}{10}$ or $\frac{2}{5}$	£105	$\frac{33}{40}$	21
$x = 4$	4,999,850	1	2	40%	£6.80	$\frac{20}{63}$
56ab	552	3.18	x^6	3	$5x + 21$	£12 : £48
20 : 25	12.75	3597	125	x^3	-32	$x^2 + 9x + 18$

DAY 8	DAY 9	DAY 10	DAY 11	DAY 12	DAY 13	DAY 14
164000	30	3267.45	52.08	400	x^{-4}	-11
40.5	0.00003054	$\frac{2}{9}$	3,800,142	0.06	$6350 \leq x < 6450$	x^{15}
2, 3, 5, 7, 11, 13	$5(x + 2)$	£4,444	$P(e) = 0$	$x = 5$	255.21	$2^3 \times 3 \times 7$
£13.50 : £4.50	$16 + 17 = 33$	$3xy(x + 3y)$	£160	mode = 3 range = 5	$x = 5$	12.5 cm^2
$x^2 - 2x - 15$	50 : 3	4	$2(a^2b + 4ab^2 + 3)$	6	1	$x = 1.5$
False. (-1)	$x^2 + 5x - 14$	36 cm^2	72	$(x + 2)(x + 5)$	$10 - 5a + 6b$	0.95