



# Year 9H Maths Summer Homework

Name:

Maths Teacher:

Due date:

Homework Sheet 1	Week Beginning 23 <sup>rd</sup> July
C1: It takes 200g of flour to make 5 fairy cakes. How much flour would it take to make 8 fairy cakes?	
2: Make $x$ the subject of $m = \frac{x}{n} + 5$	
C3: Russell, Sarah, and Terry share money in the ratio 2:5:8. In total they have £120. Work out how much each gets.	
4: Simplify $a^2 \times a^3$	
5: Write 56 as a product of primes.	
6: Write $1.3 \times 10^6$ as a decimal number.	
7: Find the value of $3c + 5d$ when $c = 2$ and $d = 5$	
8: Expand $5(2c + d)$	
9: Factorise $7c + 21d$	
10: Find the mode of 4, 5, 7, 9, 5, 8, 6, 5, 6, 7	
Mark:	Effort:

Homework Sheet 2	Week Beginning 30 <sup>th</sup> July
C1: A 750g box of cereal costs £3.30. How much would a 1kg box cost?	
2: Make $x$ the subject of $q = 5(x + 3)$	
C3: Russell, Sarah, and Terry share money in the ratio 2:5:8. In total they have £120. Work out how much more Terry gets than Russell.	
4: Simplify $\frac{b^7}{b^3}$	
5: Write 84 as a product of primes.	
6: Write $3.2 \times 10^3$ as a decimal number.	
7: Find the value of $5e - 3f$ when $e = 4$ and $f = 6$	
8: Find the value of $8(2e - 7f)$	
9: Factorise $8e - 20$	
10: Find the median of 4, 5, 7, 9, 5, 8, 6, 5, 6, 7	
Mark:	Effort:

Homework Sheet 3	Week Beginning 6 <sup>th</sup> August
C1: A 50g chocolate bar costs 60p. How much does each gram cost?	
2: Make $x$ the subject of $w = x^2 - 2$	
C3: Russell, Sarah, and Terry share money in the ratio 2:5:8. Sarah has £120. Work out how much Russell and Terry get.	
4: Simplify $(c^5)^3$	
5: Write 135 as a product of primes.	
6: Write $4.2 \times 10^4$ as a decimal number.	
7: Find the value of $6g - h^2$ when $g = 5$ and $h = 5$	
8: Expand $9(g - 4h)$	
9: Factorise $15g - 10h$	
10: Find the range of 4, 5, 7, 9, 5, 8, 6, 5, 6, 7	
Mark:	Effort:

Homework Sheet 4	Week Beginning 13 <sup>th</sup> August
C1: The cost of a 300g jar of coffee is £1.20. How much coffee do you get for 1p?	
2: Make $x$ the subject of $g = 10 - x$	
C3: Russell, Sarah, and Terry share money in the ratio 2:5:8. Russell gets £120 less than Terry. Work out how much each gets.	
4: Simplify $d^4 \times d^{12}$	
5: Write 156 as a product of primes.	
6: Fill in the blank  $65000 = 6.5 \times 10^{\dots}$	
7: Find the value of $12 + 4j$ when $j = \frac{1}{2}$	
8: Simplify $5(8 - 3j)$	
9: Factorise $24 - 18j$	
10: Find the mean of 4, 5, 7, 9, 5, 8, 6, 5, 6, 7	
Mark:	Effort:

Homework Sheet 5	Week Beginning 20 <sup>th</sup> August
C1: To fill a 60 litre car petrol tank costs £68.40. Calculate the cost per litre.	
2: Make $p$ the subject of $y = \frac{p^2 - 7}{8}$	
C3: Russell, Sarah, and Terry share money in the ratio 2:5:8. If Sarah gets an extra £120, she will have the same as Terry. Work out how much each gets.	
4: Simplify $\frac{e^{12}}{e^4}$	
5: Write 192 as a product of primes.	
6: Fill in the blank  $72000000 = 7.2 \times 10^{\dots}$	
7: Find the value of $km$ when $k = 3$ and $m = -4$	
8: Expand $k(k + m)$	
9: Factorise $k^2 + 3k$	
10: A scale drawing of the front of a building uses a scale of 1cm = 50cm. If the picture is 17.5 cm tall, how tall is the building?	
Mark:	Effort:

Homework Sheet 6	Week Beginning 27 <sup>th</sup> August
C1: It costs £28 for 5 adult cinema tickets. How much would it cost of 9 adult cinema tickets?	
2: Make $y$ the subject of the $z = \sqrt{18y + 4}$	
3: David, Egil and Frances share money in the ratio 2:7:9. Explain why Frances will always get half of any money there share.	
4: Simplify $(d^{12})^4$	
5: Write 210 as a product of primes.	
6: Fill in the blank  $250 = 2.5 \times 10^{\dots\dots}$	
7: Find the value of $n^2 - n$ when $n = 4$	
8: Expand $n(4 - n)$	
9: Factorise $n^2 - mn$	
10: : A drawing of a microchip uses a scale of 5cm = 2mm. The chip is 10mm long. How many cm is the picture?	
Mark:	Effort:

Question	Topic	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
1	Proportion						
2	Changing the subject of the formula						
3	Ratio						
4	Indices						
5	Product of primes						
6	Multiplying by powers of 10						
7	Substitution						
8	Expand						
9	Factorise						
10	Averages						