(Week 2 day 1)

1. **Numbers (integers, fraction, decimals and percentage)**

2/6 of 66 =	2/3 of 54 =	3/6 of 90 =	5/6 of 72 =	4/6 of 90 =
22.6 – 2.1 =	22.5 + 2.6 =	3.9 + 0.59 =	47.3 – 42.5 =	0.49 + 5.8 =
-2 + (-7) =	-6 + (-17) =	7 + (-3) =	6 + (-17) =	8 + (-5) =
$3\frac{3}{5}\times 10 =$	$2\frac{3}{4}\times 12 =$	$6\frac{1}{8}-3\frac{5}{6} =$	$6\frac{1}{8}+3\frac{5}{6} =$	$5\frac{2}{7}-3\frac{3}{5} =$
1395÷15 =	1547÷7 =	76 × 78 =	237 × 14 =	0.57 × 68 =

2. **Simple algebra:** If $w = 5$, $x = 1$ and $y = -2$ find :

$\frac{y}{w}$	$\frac{y+w}{x}$	$\frac{3x-y}{w}$	$\frac{5w-2x}{y-x}$
$\frac{y-x+w}{2(y-w)}$	$\frac{xy+w}{y-x}$	$\frac{x-wy}{y+w-2x}$	$\frac{y}{x}-w$

3. **Expand and if necessary simplify the brackets.**

2 (n + m) =	3(2x – 3y) =	2(a – 3b) =	c (2a – 3b) =
2(x + y) +3(2x – y) =	7(3a – b) +5(a - 3b) =	10(a - 1) + 3(a – 3) =	3y(5 + 3) + 2(3y + 1)=
2(3x + 2) + 4(5x + 1)=	4 (e + 2f) +3 (e – f) =	3 × 4 × g × g × g =	2 × r × 2 × r × r × r=

4. **Equations (multi-steps)**

7x – 5 = 5x + 2	6x – 1 = 3x + 6	11x – 6 = 5x + 9
5 (x – 8) = 16 – x	4 (x +2) = 2x + 6	8x – 6 = 6 (x – 2)

$9 - 3x = 2(x + 4)$	$2(5 + x) = 7x - 5$	$21 - 2x = 3(x - 10)$

5. Ratios

1) The ratio of girls to boys in a school is 4:5, What fraction of these students are boys?

2) In Year11 the ratio of girls to boys is 4:3 There are 120 girls in year 11

work out the number of boys in year 11

6. Price

1) Christiana brought 13 pairs of underpants for a total cost of £103.35, Carlos bought 7 pairs of underpants, The cost of each pair of underpants bought by Christiana and Carlos was the same. Work out how much Carlos paid for his 7 pairs of underpants.

2) The cost of 4kg of broccoli is £5.52, The total cost of 3kg of broccoli and 2.5kg of carrots is £5.69 Work out the cost of 1kg of carrots, give your answer in pence.