

S3 Credit – Homework 1

1. Find the value of

(a)  $1.36 + 1.7 \times 4$

(b)  $2.61 \times 300$

(c) 35% of £260

(d)  $\frac{3}{4}$  of £140

2.  $P = \frac{a^2 - 3c}{ac}$ . Calculate P when  $a = -6$  and  $c = 4$ .

3. Solve the inequality  $2(x - 1) + 12 > 5x + 16$

4. Simplify the expression  $5(2n - 3r) - 2(n - r)$

5. (a) The diameter of a sodium atom is 0.000 000 3 millimetres.  
Write this in Scientific Notation.

(b) Loch Ness has volume  $7.443 \times 10^9$  cubic metres. Write this  
as an ordinary number.

6. Solve the pair of equations  $4g + 5k = 15$   
 $2g - 3k = 13$

7. Expand the brackets and simplify  $(3a + 4)(2a - 5)$

8. The diagram opposite shows a toy box.  
Calculate the volume of the toy box.

