



S2 Formal Homework 1

Core Section

1. Round the following numbers to 2 decimal places:

a. 4.572

b. 33.208

c. 88.8982

2. Convert the following measurements to centimetres:

a. 5.6m

b. 210mm

c. 7.26km

3. Write the number 72 as a product of prime factors.

4. The table below represents the number of air stewards(S) on a British Airways flight required for a specific number of passengers (P).

S	3	4	5	6
P	64	84	104	124

a. Find a formula for the table above.

b. On a long haul flight, 14 air stewards are on the flight. What is the maximum number of passengers allowed on the flight?

5. Evaluate the following expressions where $g = 5$, $h = 2$ and $i = -3$:

a. $gh - i$

b. $hi^2 + (g - i)^2$

6. Multiply out the following brackets and simplify:

a. $5(2x - 3)$

b. $3k(7k - 3)$

c. $9(3p - 8q) - 17q$

d. $3p(p - 2) - 5p(p - 4) + 7p$

Extension Section

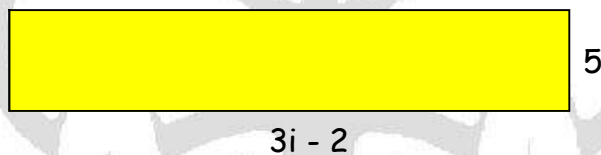
1. A survey of a sample of pupils attending a summer club on the first day was taken. 6 boys and 4 girls took part in the survey.

- Write this as a ratio, in its simplest form.
- If there were 330 boys at the club on the first day, how many girls were there?

On the final day of the summer club there were 675 children in total.

- If the ratio was the same on the final day as the first day, calculate how many boys attended.

2. A rectangle is shown below.



- Find a simplified expression for the perimeter of the shape.
- Find a simplified expression for the area of the shape.

The perimeter of the shape is found to be 72cm.

- Hence, by creating an equation, solve for the value of i .

