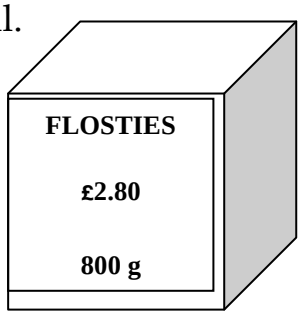
Duncanrig Secondary School – Mathematics Department

S4 National 4 Homework: Exercise 10

1. There are approximately 57½ million people in the United Kingdom at present.
   (a) Write this number using figures.
   (b) Now write this number in scientific notation.

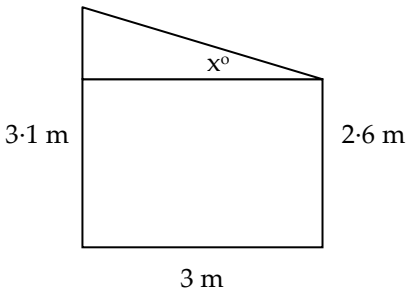
2. Shown is the large size of Flosties Breakfast Cereal.



   (a) Calculate the cost of 100 grams of Flosties

   (b) The smaller 500 gram pack cost £1·85.
   Which of the two packs is the better buy?
   (Give a reason for your answer).

3. (a) Draw a coordinate grid from 0 to 10 for both axes.
   (b) Plot the 2 points P(8, 1) and Q(2, 5).
   (c) By creating a right angled triangle calculate the length of the line PQ (answer to 1 d.p.)
   (d) What is the gradient of the line PQ

4. 

A lean-to-shed is 3·1m high at the back and 2·6m at the front. The width of the shed is 3m. Find the angle of the slope of the roof, x°.