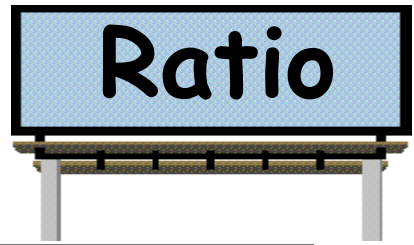## S1 Level 3 Formal Homework
(Show all working!)

Ratio

Non Calculator Section: **If working is not shown for this section then no marks will be awarded.**

1.   a) 4520 – 175.45   b) 15 x 46   c) 7 + (-18)

2.   Simplify the following ratios:
      (a) 4 : 6   (b) 5 : 25   (c) 60 : 24 : 30

3.   On a trip to M&D's there were 8 teachers and 120 pupils. Write in simplest form the ratio of:
      (a) teachers to pupils   (b) pupils to teachers.

4.   In a class, the ratio of boys to girls is 4 : 5.
      (a) If there are 15 girls how many boys are there?
      (b) If there are 20 boys how many girls are there?

5.   A farmer knows he needs 4 sheep dogs for every 90 sheep.
      If the farmer has 135 sheep, how many sheep dogs would be need?

6.   (a) Alex and Ryan win £15,000 on the lottery. They decide to split it 2:3.
      Calculate how much both Alex and Ryan will each receive.
      (b) Why might they have decided not to split it 50/50?

Revision Section:
7.   (a) Write down the coordinates of A, B and C
      (b) A is reflected in the x axis - what are its new coordinates?
      (c) C is reflected in the y axis – what are its new coordinates?