**Topic 1: Number and Algebra** 

- Each year the Dallas Cowboys play 8 games on their home field. Their owner claims the average attendance last year was 92,000 people. The total attendance at home was actually 732,958 people.
  - (a) Based on this claim, calculate the total attendance for the games the Cowboys played at home last year.

(2 marks)

(b) Calculate the percentage error in the owner's claim

(2 marks)

(c) Write down your answer to part (b) in the form  $a*10^k$  where  $1 \le a < 10, k \in \mathbb{Z}$ 

(2 marks)

Mark scheme:

$$=736000$$
 (A1)

(b) 
$$\left| \frac{736000 - 732958}{736000} \right| \times 100$$
 (M1)

$$= .415\%$$
 (A1)

(c) 
$$4.15 * 10^{-1}$$
 (A1) for the 4.15 (A1) for the  $10^{-1}$ 

Follow through from the answer to part (b)