

The City School

Boys Campus North Nazimabad

Worksheet 1

Topic: Numeration

- Q1: a) In 2005, the cost of posting a letter was 28 cents. A company posted 1200 letters and was given 4% discount on the cost. Calculate the total discount. (1)
- b) In 2006, the cost of posting a letter was increased from 28 cents to 35 cents. Calculate the percentage increase in the cost of posting a letter. (2)
- c) After the price increase to 35 cents, the cost to the company of posting 1200 letters was \$399. Calculate the percentage discount that the company was given in 2006. (2)
- d) In 2006, it cost \$4.60 to post a parcel. This was an increase of 15% on the cost of posting the parcel in 2005.(3)

Q2:a) On average, Jim's heart beats 75 times per minute. Calculate the number of times his heart beats during 50 weeks. Give your answer in standard form. (2)

b) After an exercise, Ali and Ben measured their heart rates. The ratio of their heart rates was 15:17. Ben's heart beat 18 times per minute more than Ali's. Calculate Ali's heart rate.

c) The recommended maximum heart rate, H , for a man during exercise, is given by the formula.

$$H = \frac{4}{5}(220 - n)$$

Where n years is the age of the man.

- i) Calculate H when $n = 25$. (1)
- ii) Calculate n when $H = 144$. (1)
- iii) Make n the subject of this formula. (2)