Mission Heights Junior College

Year 10 Number Assessment 2012

1.   Write 6.5×10^6 as an ordinary number. _____

2.   In a 300g mass of an alloy, 280g was copper.
   (a)   What percentage content of the alloy was copper?

   _____

   _____

   (b)   Write your answer to 2 significant figures. _____

3.   Bill and Sue shared $30 they earned in the ratio of 2:3.
   How much did they each get?

   _____

   _____

4.   Roimata bought some material worth $25.60.
   She was given a discount of 20%.
   What did she finally pay?

   _____

   _____

5.   Sara earns $20 a week babysitting.
   She saves $2.50 each week.
   What percentage does she save?

   _____

_____

6. The wavelength of yellow light is 0.000 000 65 m.
   A new invisible wave length is discovered that has a wave length that is
   $\frac{1}{4}$ that of yellow light
   Write the new wave length in standard form.

   _____

   _____

7. Telecom has 843,212 customers in New Zealand, 343,991 are school students.
   What percentage of Telecom customers are school students?

8. Mere bought a large bag of bran weighing 54 kg.
   2/3 of this was to feed his hens.
   She gave 1/4 of the remainder to her neighbour.
   (a)   What weight does he have left?

   _____

   _____

   _____

   (b)   Write your answer as a mixed number.

   _____

9. At the start of the year, the price of a litre of milk was $2.99
   Eight months later she saw that the price was $4.30.
   a) Calculate the increase as a percentage of the original price.

   _____

_____

      b) Round your answer sensibly and state the rounding. _____

10.   Helen heard on the radio that the price of unleaded 91 octane petrol had gone up
      by 8% to $2.11.
      Calculate the price before the increase.

_____

_____

11. Find the simple interest when $5000 is borrowed for 1 year at 12% per annum simple
interest.

12. A school is organising the annual school ball. These are the costs involved:

Hire of hall $1 800
Cost of decorations $ 500
Hire of band for 5 hours at $40 per hour
Cost of dinner is $15 per person
Cost of printing tickets is 80 cents per ticket

A survey indicates that $\frac{3}{5}$ of the 424 senior students in the school will attend the ball. The
organisers hope to make a profit of 10%. **How much should they charge for each ticket?**

*Show full working, explaining with a few words what you are doing at each step and round your
answers sensibly when necessary.*

13.Billy went shopping at 'NUWorld' bought 350gms ham priced at $15.60/kg, 400gms of tomatoes at $4.90/kg and 14 cheese buns costing 65 cents each.

Since it is NU birthday NUWorld is offering G.S.T off the total cost of shopping.

How much will Billy have to pay for his shopping?

State what you are working out at each step.