WORD PROBLEMS ABOUT H.C.F. AND L.C.M.

1.- As a humanitarian effort, food ration is distributed to each refugee in a refugee camp. If a day’s ration is 284 packets of biscuits, 426 packets of instant noodles and 710 bottles of water, how many refugees are there in the camp?

   Sol: 142 refugees

2.- 294 blue balls, 252 pink balls and 210 yellow balls are distributed equally among some students with none left over. What is the biggest possible number of students?

   Sol: 42 students

3.- A group of girls bought 72 rainbow hairbands, 144 brown and black hairbands, and 216 bright-coloured hairbands. What is the largest possible number of girls in the group?

   Sol: 72 girls

4.- A man has a garden measuring 84 m by 56 m. He wants to divide them equally into the minimum number of square plots. What is the length of each square plot?

   Sol: 28 m

5.- Leonard wants to cut identical square as big as he can from a piece of paper 168 mm by 196 mm. What is the length of each square?

   Sol: 28 cm

6.*- 32 girls and 52 boys were on an overseas learning trip, and they were divided into as many groups as possible where the number of groups of girls and the number of groups of boys are the same. How many girls and how many boys are there in each group?

   Sol: 8 girls, 13 boys

7.- A small bus interchange has 2 feeder services that start simultaneously at 9am. Bus number 801 leaves the interchange at 15-min intervals, while bus number 802 leaves at 20-min intervals. On a particular day, how many times did both services leave together from 9 am to 12 noon inclusive?

   Sol: 4 times

8.- Candice, Gerald and Johnny were jumping up a flight of stairs. Candice did 2 steps at a time, Gerald 3 steps at time while Johnny 4 steps at a time. If they started on the bottom step at the same, on which step will all 3 land together the first time?

   Sol: 12th step

9.- Heidi helps out at her mum’s stall every 9 days while her sister every 3 days. When will they be together if they last helped out on June 16 2008?

   Sol: June 25 2008
10.- A group of students can be further separated into groups of 5, 13 and 17. What is the smallest possible total number of students?

Sol: 1105 students

11.- Jesslyn goes to the market every 64 days. Christine goes to the same market every 72 days. They met each other one day. How many days later will they meet each other again?

Sol: 576 days

12.*- Mrs Goh and 3 of her friends went to a supermarket and found that a package of 6 dishcloths cost $10. If they were to share the purchase such that each has the same number of dishcloths, what is the minimum amount each has to pay?

Sol: $5