Maths Questions on Prime Factors, LCM and HCF Homework

1   List the factor pairs of 96.

2   Express the following numbers as a product of their prime factors

      a. 24   b.   60   c.   55   d.   80   e.   144

3   Find the lowest common multiple of the following pairs of numbers.

      a. 36 and 50   b.   12 and 16   c.   20 and 45

4   Find the highest common factors of the following pairs of numbers.

      a. 24 and 38   b.   50 and 65   c.   18 and 198

5   The product of the prime factors of two numbers, A and B are as follows:

$$A = 3^3 \times 5^2 \times 11^2$$
$$B = 2^3 \times 3^2 \times 7^3$$

What is lcm (A,B) – hcf (A,B)?

6   A group of numbers is shown below. Match each number in the group to the correct description of that number.

2		A perfect number
6		A cube number
7		A square number
24		A multiple of 2,3,4
100		An even prime number
216		A prime number > 2