FACTORS AND MULTIPLES

Assessment 3

Name: .... Class: .... Date: ....

---

1. Fill in the blanks:

   (a) The LCM of 4 and 6 is ⎯⎯⎯⎯.

   (b) The prime factors of 24 are ⎯⎯⎯⎯ and ⎯⎯⎯⎯.

   (c) The HCF of 6 and 8 is ⎯⎯⎯⎯.

   (d) The prime numbers between 10 and 15 are ⎯⎯⎯⎯ and ⎯⎯⎯⎯.

   (e) An odd number always leaves a remainder of ⎯⎯⎯⎯ when divided by 2.

   (f) The product of two consecutive numbers is a/an ⎯⎯⎯⎯ number.

   (g) 6733 is ⎯⎯⎯⎯ (divisible/not divisible) by 3.

   (h) The largest prime number less than 40 is ⎯⎯⎯⎯ .

2. Verify that the number 36432 is divisible by 6.

3. Find the largest 3-digit number exactly divisible by 7.

4. Find all the prime factors of 56.

5. Find the LCM and the HCF of 18 and 24.

6. Using prime factorisation, find the HCF of 48 and 64.

7. List the first eight multiples of 6, 8 and 12. Find their least common multiple.

8. List all the prime numbers between 20 and 40. Find the sum of the prime numbers.

9. Use the long division technique to find the HCF of 124 and 144.

10. Two water tanks have capacities 30 L and 18 L respectively. Find the highest measure of a measuring cylinder which can exactly measure the water when they are full.

11. Find the HCF of 72, 108 and 207 using long division.

12. Find the least length of a rope which can be measured exactly using measuring rods of 8 cm and 10 cm. Also calculate whether or not a 2 m rope can be measured exactly by these measuring rods. Give reasons for your answer.

13. Find the LCM and HCF of the numbers 12, 18 and 24 using prime factorisation.

Insight Mathematics 6