(III) PRIME NUMBER AND PRIME FACTORS

(i) A prime number is a number which has only two different factors, itself and one e.g 2, 3, 5, 7, 11, 13, 17, 19 etc. All have two factors. But note that 1 is not a prime number since it does not have two different factors.

(ii) A prime factor of a number is a factor which is a prime number i.e it has no factor e.g the prime factors of 28 is 2 and 7.

EXERCISE 16.4

Study the sample below, then answer questions 1 - 10. Show your workings in the spaces provided.

Sample:

(i) 4 ⟶ 2 · 2

(ii) 8 ⟶ 2 · 2 · 2

(iii) 15 ⟶ 3 · 5

(iv) 18 ⟶ 2 · 3 · 3

(1) 9 ⟶ 3 · _____

(2) 15 ⟶ 3 · _____

(3) 35 ⟶ 5 · _____

(4) 26 ⟶ 2 · _____

(5) 55 ⟶ 11 · _____

(6) 14 ⟶ 2 · _____

(7) 21 ⟶ 7 · _____

(8) 34 ⟶ 2 · _____

(9) 39 ⟶ 13 · _____

(10) 65 ⟶ 5 · _____

(IV) COMMON FACTORS

A common factor is a factor that can divide two or more given multiples e.g. 3 can divide both 6 and 9, so 3 is the common factor of 6 and 9.

EXERCISE 16.5

Underline the common factor for each of the given group of multiples. then answer questions 1 - 10.

Sample:

4 and 6 = 3 4 <u>2</u>	9 and 12 = 2 <u>3</u> 4

(1) 4 and 8 = 3 4 5

(2) 6 and 12 = 3 5 7

(3) 6 and 9 = 8 5 3

(4) 16 and 24 = 4 6 12

(5) 12 and 16 = 10 6 4

(6) 12 and 24 = 5 3 8

(7) 8 and 24 = 6 2 9

(8) 12 and 16 = 5 7 4

(9) 8 and 16 = 5 6 8

(10) 8 and 12 = 5 2 6