

Taxila Central College – Horana

Grade 06

Maths

(11) Factors and Multiples

Identifying factors

Method 1: By writing as a product of two whole numbers.

- ❖ When a whole number is written as a product of two whole numbers, those two numbers are known as factors of the original numbers.

Ex: i. factors of 12

$$12 = 1 \times 12$$

$$= 2 \times 6$$

$$= 3 \times 4$$

$$= 4 \times 3$$

$$= 6 \times 2$$

$$= 12 \times 1$$

} Some numbers are repeated (it is a repetition) Therefore remove them.

∴ therefore factors of 12 – 1 , 2 , 3 , 4 , 6 and 12

ii. factors of 10

$$10 = 1 \times 10 \text{ therefore factors}$$

$$= 2 \times 5$$

$$= 5 \times 2 \text{ (repetition)}$$

∴ therefore factors of 10– 1 , 2 , 5 , and 10

iii. factors of 16

$$16 = 1 \times 16$$

$$= 2 \times 8$$

$$= 4 \times 4$$

$$= 8 \times 2$$

∴ therefore factors of 16 – 1 , 2 , 4 , 8 and 16

iv. factors of 20

$$20 = 1 \times 20$$

$$= 2 \times 10$$

$$= 4 \times 5$$

$$= 5 \times 4$$

∴ therefore factors of 20 – 1 , 2 , 4 , 5 , 10 and 20

- ❖ **“1” and the “given number” are two distinct factors of any number.**
- ❖ **But “0” is not a factor of any number**

Now you can complete the exercise 11.1