

Exercise 2.2

Q.1 Find the Common factors of

- (i) 15 and 25 (ii) 35 and 50 (iii) 20 and 28

Solution (i) factors of 15 = 1, 3, 5, 15 ;

factors of 25 = 1, 5, 25

∴ Common factors are 1 and 5

(ii) Factors of 35 = 1, 5, 7, 35

Factors of 50 = 1, 5, 10, 25, 50

∴ Common factors are 1 and 5

(iii) Factors of 20 = 1, 2, 4, 5, 10, 20

Factors of 28 = 1, 2, 4, 7, 14, 28

∴ Common factors are 1, 2, 4.

Q.2 Find the Common factors of:

(i) 5, 15 and 25

(ii) 2, 6 and 8

Sol: factors of 5 = 1, 5

factors of 15 = 1, 3, 5, 15

factors of 25 = 1, 5, 25

∴ Common factors of 1 and 5

(11) factors of 2 = 1, 2

factors of 4 = 1, 2, 4

factors of 8 = 1, 2, 4, 8

$\therefore$ Common factors are 1 and 2

Q.3 Find first 3 Common Multiples of 6 and 8

Sol: Multiples of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66

Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72...

$\therefore$ First 3 common Multiples are 24, 48 and 72.

Q.4 Find first two common Multiples of 12 and 18

Sol: Multiples of 12 = 12, 24, 36, 48, 60, 72...

Multiples of 18 = 18, 36, 54, 72, 90...

$\therefore$ First two common multiples are 36 and 72.

Q.5 A number is divisible by both 7 and 16. By which number will that number be always divisible?

Sol: As, the other number is always divisible by common factors of 7 and 16,

$\therefore$ factors of 7 are 1 and 7

factors of 16 are 1, 2, 4, 8, 16

$\therefore$ Common factor is only 1.

$\therefore$ The number is always divisible by 1.

Q.6 A number is divisible by 24. By what other numbers will that number be divisible.

Sol: That number is divisible by factors of 24
That is 1, 2, 3, 4, 6, 8 and 12

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