

Factor and multiples

A1 1 is a factor everyone.

2 2 is the first even prime number.

3 The smallest multiple of a number is the number itself.

4 ~~Every~~ 1 is multiple of Every number.

5 Prime number are having two Number of factor.

B1

1a Every number is a multiple of

b 1

2 b Composite number are the number having more than two factor is other than 1 and Number itself.

c b

1

30 Every _____ number can be expressed as a product of all its prime factors.

b Composite

4 Every composite numbers are having more than _____ factors

a two

⑤ When a particular number is a multiple of 2 or more numbers it is called common multiple

C1 Multiple of 18 - 18, 36, 54, 72, 90.

2 HCF 40, 50, 60 prime factorization

2	40	5	50	2	60	2	60
2	20	5	10	3	30	3	30
2	10		2	2	10	2	10
	5					5	5

$$40 = 2 \times 2 \times 2 \times 5$$

$$50 = 5 \times 5 \times 2$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$HCF = 2 \times 5 = 10$$

3Q LCM of 36, 52 by listing method

$$36: 36, 72, 108, 144, 180, 216, 252, 288$$

$$360, 396, 432, (468)$$

$$52: 52, 104, 156, 208, 260, 312, 364$$

$$416, (468)$$

$$LCM = 468$$

H LCM of 15 and 90 by common division method

$$\begin{array}{r|l} 5 & 15, 90 \end{array}$$

$$\begin{array}{r|l} 3 & 3, 18 \end{array}$$

$$\begin{array}{r|l} 2 & 1, 6 \end{array}$$

$$1, 3$$

$$2 \times 5 \times 3 \times 3 = 90$$

$$LCM = 90$$

5. HCF of 144, 180 and 192 by common division

method

2	144, 180, 192
2	72, 90, 96
3	36, 45, 48
	12, 15, 16

$$\text{HCF } 2 \times 2 \times 3 = 12$$