HCF questions for class 6 (worksheet)

(i)   Find the HCF of the following numbers:
(a) 11, 44
(b) 35, 42
(c) 128, 60
(d) 81, 63
(e) 36, 180
(f) 1152, 1664

(ii)   Find the HCF by finding all the factors.

(a) 36, 48, 96
(b) 31, 37, 33
(c) 64, 74, 84

(iii)   Find the HCF by prime factorization   method.
(a) 30, 45, 75
(b) 27, 30
(c) 18, 64, 80

(iv)   Find the HCF by long division method
(a) 16 , 20
(b) 35, 95
(c) 65, 135

(v)   Find the HCF of 70, 105, 175 .

(vi)   Two buckets contain 15 litres and 25 litres of water. Find the maximum capacity of a mug that can exactly measure the water in both the buckets.

(vii)   Two ropes, one 8 metres long and the other 12 metres long are to be cut into pieces of the same length. What will the maximum possible length of each piece be ?

(viii)   The number of students of Std 6th and Std 7th who went to visit the Tadoba Tiger Project at Chandrapur was 140 and 196 respectively. The students of each class are to be divided into groups of the same number of students. Each group can have a paid guide. What is the maximum number of students there can be in each group ?

(ix)   At the Rice Research Centre at Tumsar, there are 2610 kg of seeds of the basmati variety and 1980 kg of the Indrayani variety. If the maximum possible weight of seeds has to be filled to make bags of equal weight what should be the weight of each bag ? How many bags of each variety will there be ?

(x)   Three pices of timber 42m, 49m and 63m long have to be divided into planks of the same length. What is the greatest possible length of each plank?

Ans. (i) (a) 11   (b) 7   (c) 4   (d) 9   (e) 12   (f) 128

   (ii) (a) 12   (b) 1   (c) 2

   (iii) (a) 15   (b) 3   (c) 2

(iv) (a) 4   (b) 5   (c)5

(v) 35

(vi) 5 litres

(vii)4 m

(viii)28 students

(ix) maximum weigth of each bag should be 90 kg,

Number of bags filled with the seeds of basmati rice = 29

Number of bags filled with the seeds of Indrayani rice= 22

(x)7m