1. Find the common factors and list them:
a) 4 and 6

Factors of $4=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 4$
Factors of $6=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 3,6$
Ans. The common factors of 4 and 6 are 1 and 2.
b) 3 and 9

Factors of $3=\underline{1}, \underline{3}$
Factors of $9=\underline{\mathbf{1}}, \underline{\mathbf{3}}, 9$
Ans. The common factors of 3 and 9 are $\underline{1}$ and 3.
c) 10 and 14

Factors of $10=\underline{\mathbf{1}}, \mathbf{2}, 5,10$
Factors of $14=\underline{\mathbf{1}}, \mathbf{2}, 7,14$
Ans. The common factors of 10 and 14 are $\mathbf{1}$ and 2.
d) 16 and 18

Factors of $16=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 4,8,16$
Factors of $18=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 3,6,9,18$
Ans. The common factors of 16 and 18 are $\mathbf{1}$ and 2.
e) 20 and 24

Factors of $20=\mathbf{1}, \mathbf{2}, 4,5,10,20$
Factors of $24=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 3, \underline{4}, 6,12,24$
Ans. The common factors of 20 and 24 are 1,2 and 4.
f) 22 and 33

Factors of $22=1,2,11,22$
Factors of $33=\underline{1}, 3,11,33$
Ans. The common factors of 22 and 33 are 1 and 11.
g) 17 and 34

Factors of $17=\underline{1}, \underline{17}$
Factors of $34=\underline{1}, 2, \underline{17}, 34$
Ans. The common factors of 17 and 34 are 1 and 17.
h) 16 and 32

Factors of $16=\underline{1}, \underline{2}, \underline{8}, \underline{16}$
Factors of $32=\underline{1}, \underline{\mathbf{2}}, \mathbf{4}, \underline{\mathbf{8}}, \underline{16}, 32$
Ans. The common factors of 16 and 32 are 1, 2, 4, 8 and 16.
i) 36 and 54

Factors of $36=\underline{\mathbf{1}}, \underline{\mathbf{2}}, \underline{\mathbf{3}}, 4, \underline{\mathbf{6}}, \underline{9}, 12, \underline{18}, 36$
Factors of $54=\underline{1}, \underline{\mathbf{2}}, \underline{\mathbf{3}}, \underline{\mathbf{6}}, \underline{18}, 27,54$
Ans. The common factors of 36 and 54 are 1, 2, 3, 6, 9 and 18.
j) 24 and 28

Factors of $24=\mathbf{1}, \mathbf{2}, 3, \underline{4}, 6,8,12,24$
Factors of $28=\mathbf{1}, \mathbf{2}, 4,7,14,28$
Ans. The common factors of 24 and 28 are 1,2 and 4.
2. Find the H. C. F. of the following numbers:
a) 14 and 20

Factors of $14=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 7,14$
Factors of $20=\underline{\mathbf{1}}, \mathbf{2}, 4,5,10,20$
The common factors of 14 and 20 are 1 and 2 .
So, the H.C.F. of 14 and 20 is $\mathbf{2}$.
b) 2 and 8

Factors of $2=\underline{\mathbf{1}}, \underline{\mathbf{2}}$
Factors of $8=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 4,8$
The common factors of 2 and 8 are 1 and 2 .
So, the H.C.F. of 2 and 8 is $\underline{\mathbf{2}}$.
c) 12 and 20

Factors of $12=\underline{\mathbf{1}}, \underline{\mathbf{2}}, \mathbf{4}, 6,12$
Factors of $20=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 4,10,20$
The common factors of 12 and 20 are 1,2 and 4.
So, the H.C.F. of 12 and 20 is 4.
d) 24 and 48

Factors of $24=\underline{1}, \underline{2}, \underline{3}, \underline{6}, \underline{8}, \underline{12}, \underline{24}$
Factors of $48=\underline{1}, \underline{\mathbf{2}}, \underline{3}, \underline{4}, \underline{6}, \underline{12}, 16, \underline{24} 48$
The common factors of 24 and 48 are $1,2,3,4,6,8,12$ and 24.
So, the H.C.F. of 24 and 48 is $\underline{24}$.
e) 16 and 18

Factors of $16=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 4,8,16$
Factors of $18=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 3,6,9,18$
The common factors of 16 and 18 are 1 and 2 .
So, the H.C.F. of 16 and 18 is $\mathbf{2}$.
f) 10 and 15

Factors of $10=\underline{1}, 2, \underline{\mathbf{5}}, 10$
Factors of $15=\underline{1}, 3, \underline{\mathbf{5}}, 15$
The common factors of 10 and 15 are 1 and 5 .
So, the H.C.F. of 10 and 15 is $\mathbf{5}$.
g) 20 and 30

Factors of $20=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 4, \underline{\mathbf{5}}, \underline{\mathbf{1 0}}, 20$
Factors of $30=\underline{\mathbf{1}}, \underline{\mathbf{2}}, 3, \underline{\mathbf{5}}, 6, \underline{\mathbf{1 0}}, 15,30$
The common factors of 20 and 30 are 1, 2, 5 and 10.
So, the H.C.F. of 20 and 30 is $\mathbf{1 0}$.
h) 6 and 9

Factors of $6=\underline{1}, 2, \underline{3}, 6$
Factors of $9=\underline{1}, \underline{3}, 9$
The common factors of 6 and 9 are 1 and 3 .
So, the H.C.F. of 6 and 9 is $\underline{\mathbf{3}}$.
i) 15 and 18

Factors of $15=\mathbf{1}, \mathbf{3}, 5,15$
Factors of $18=\underline{\mathbf{1}}, \mathbf{2}, \underline{\mathbf{3}}, 6,9,18$
The common factors of 15 and 18 are 1 and 3 .
So, the H.C.F. of 15 and 18 is $\mathbf{3}$.
j) 36 and 45

Factors of $36=\underline{1}, 2, \underline{\mathbf{3}}, 4,6, \underline{9}, 12,18,36$
Factors of $45=\underline{\mathbf{1}}, \underline{\mathbf{3}}, 5, \underline{\mathbf{9}}, 15,45$
The common factors of 36 and 45 are 1,3 and 9.
So, the H.C.F. of 36 and 45 is $\underline{9}$.

