1. **Find the common factors and list them:**

   a) 10 and 20

   Factors of 10 = **1**, **2**, **5**, **10**

   Factors of 20 = **1**, **2**, 4, **5**, **10**, 20

   Ans. The common factors of 10 and 20 are **1, 2, 5 and 10**.

   b) 4 and 8

   Factors of 4 = **1**, **2**, **4**

   Factors of 8 = **1**, **2**, **4**, 8

   Ans. The common factors of 4 and 8 are **1, 2 and 4**.

   c) 9 and 18

   Factors of 9 = **1**, **3**, **9**

   Factors of 18 = **1**, 2, **3**, 6, **9**, 18

   Ans. The common factors of 9 and 18 are **1, 3 and 9**.

   d) 32 and 36

   Factors of 32 = **1**, **2**, **4**, 8, 16, 32

   Factors of 36 = **1**, **2**, 3, **4**, 6, 9, 12, 18, 36

   Ans. The common factors of 32 and 36 are **1, 2 and 4**.

   e) 12 and 24

   Factors of 12 = **1**, **2**, **3**, **4**, **6**, **12**

   Factors of 24 = **1**, **2**, **3**, **4**, **6**, 8, **12**, 24

   Ans. The common factors of 12 and 24 are **1, 2, 3, 4, 6 and 12**.

   f) 30 and 35

   Factors of 30 = **1**, 2, 3, **5**, 6, 10, 15, 30

   Factors of 35 = **1**, **5**, 7, 35

   Ans. The common factors of 30 and 35 are **1 and 5**.

g) 6 and 4

Factors of 6 = **1**, **2**, 3, 6

Factors of 4 = **1**, **2**, 4

Ans. The common factors of 6 and 4 are **1 and 2**.

h) 20 and 30

Factors of 20 = **1**, **2**, 4, **5**, **10**, 20

Factors of 30 = **1**, **2**, 3, **5**, 6, **10**, 15, 30

Ans. The common factors of 20 and 30 are **1, 2, 5 and 10**.

i) 21 and 27

Factors of 21 = **1**, **3**, 7, 21

Factors of 27 = **1**, **3**, 9, 27

Ans. The common factors of 21 and 27 are **1 and 3**.

j) 18 and 24

Factors of 18 = **1**, **2**, **3**, **6**, 9, 18

Factors of 24 = **1**, **2**, **3**, 4, **6**, 8, 12, 24

Ans. The common factors of 18 and 24 are **1, 2, 3 and 6**.

2. **Find the H. C. F. of the following numbers:**

a) 18 and 24

Factors of 18 = **1**, **2**, **3**, **6**, 9, 18

Factors of 24 = **1**, **2**, **3**, 4, **6**, 8, 12, 24

The common factors of 18 and 24 are 1, 2, 3 and 6.

So, the H.C.F. of 18 and 24 is **6**.

b) 16 and 20

Factors of 16 = **1**, **2**, **4**, 8, 16

Factors of 20 = **1**, **2**, **4**, 5, 10, 20

The common factors of 16 and 20 are 1, 2 and 4.

So, the H.C.F. of 16 and 20 is **4**.

c) 12 and 18

Factors of 12 = **1**, **2**, **3**, 4, **6**, 12

Factors of 18 = **1**, **2**, **3**, **6**, 9, 18

The common factors of 12 and 18 are 1, 2, 3 and 6.

So, the H.C.F. of 12 and 18 is **6**.

d) 2 and 14

Factors of 2 = **1**, **2**

Factors of 14 = **1**, **2**, 7, 14

The common factors of 2 and 14 are 1 and 2.

So, the H.C.F. of 2 and 14 is **2**.

e) 12 and 20

Factors of 12 = **1**, **2**, 3, **4**, 6, 12

Factors of 20 = **1**, **2**, **4**, 5, 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**.

f) 28 and 42

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

Factors of 42 = **1**, **2**, 3, 6, **7**, **14**, 21, 42

The common factors of 28 and 42 are 1, 2, 7 and 14.

So, the H.C.F of 28 and 42 is **14**.

g) 11 and 77

Factors of 11 = **1**, **11**

Factors of 77 = **1**, 7, **11**, 77

The common factors of 11 and 77 are 1 and 11.

So, the H.C.F. of 11 and 77 is **11**.

h) 15 and 30

Factors of 15 = **1**, **3**, **5**, **15**

Factors of 30 = **1**, 2, **3**, **5**, 6, 10, **15**, 30

The common factors of 15 and 30 are 1, 3, 5 and 15.

So, the H.C.F. of 15 and 30 is **15**.

i) 4 and 16

Factors of 4 = **1**, **2**, **4**

Factors of 16 = **1**, **2**, **4**, 8, 16

The common factors of 4 and 16 are 1, 2 and 4.

So, the H.C.F. of 4 and 16 is **4**.

j) 16 and 24

Factors of 16 = **1**, **2**, **4**, **8**, 16

Factors of 24 = **1**, **2**, 3, **4**, 6, **8**, 12, 24

The common factors of 16 and 24 are 1, 2, 4 and 8.

So, the H.C.F. of 16 and 24 is **8**.

Abir Panja