Playing with Numbers Ex 2.7 Q1

Answer :

(i) 300 and 450

Dividend = 450 and divisor = 300

```
300) 450 (1
     300
     ---
     150 ) 300 (2
           300
           ---
             0
```

Clearly, the last divisor is 150.

Hence, HCF of the given numbers is 150.

(ii) 399 and 437

We have dividend = 399 and divisor = 437

```
399) 437 (1
     399
     ---
      38 ) 399 (10
            38
           ---
            19 ) 38 (2
                 38
                 --
                  0
```

Clearly, the last divisor is 19.

Hence, HCF of the given numbers is 19.

(iii) 1045 and 1520

We have dividend = 1045 and divisor = 1520

$$
\begin{array}{r}
1045\overline{)1520}(1 \\
\underline{1045} \\
475\overline{)1045}(2 \\
\underline{950} \\
95\overline{)475}(5 \\
\underline{475} \\
0
\end{array}
$$

Clearly, the last divisor is 95.

Hence, HCF of the given numbers is 95.

Playing with Numbers Ex 2.7 Q2

Answer :

We know that two numbers are co-primes if their HCF is 1.

(i) 59 and 97

Here, dividend = 97 and divisor = 59

$$
\begin{array}{r}
59\overline{)97}(1 \\
\underline{59} \\
38\overline{)59}(1 \\
\underline{38} \\
21\overline{)38}(1 \\
\underline{21} \\
17\overline{)21}(1 \\
\underline{17} \\
4\overline{)17}(4 \\
\underline{16} \\
1\overline{)4}(4 \\
\underline{4} \\
0
\end{array}
$$

Clearly, the last divisor is 1.

Hence, the given numbers are co-primes.

(ii) 875 and 1859

Here, dividend = 1,859 and divisor = 875

```
875)1859(2
    1750
    ----
     109)875(8
         872
         ---
           3)109(36
              9
             --
             19
             18
             --
              1)3(3
                3
                -
                0
```

Clearly, the last divisor is 1.

Hence, the given numbers are co-primes.

(iii) 288 and 1375

Here, dividend = 288 and divisor = 1,375

```
288)1375(4
    1152
    ----
     223)288(1
         223
         ---
          65)223(3
             195
             ---
              28)65(2
                 56
                 --
                  9)28(3
                    27
                    --
                     1)9(9
                       9
                       -
                       0
```

Clearly, the last divisor is 1.

Hence, the given numbers are co-primes.

*********** END **********