



Exercise 2D

$$\text{Now, } 1197 = 3 \times 3 \times 7 \times 19 = 3^2 \times 7 \times 19$$

$$5320 = 2 \times 2 \times 2 \times 5 \times 7 \times 19 = 2^3 \times 5 \times 7 \times 19$$

$$4389 = 3 \times 7 \times 19 \times 11$$

$$\therefore \text{Required HCF} = 19 \times 7 = 133$$

Q10

Answer :

We have:

$$\begin{array}{r}
 1 \\
 58 \overline{) 70} \\
 \underline{-58} \\
 12 \overline{) 58} (4 \\
 \underline{-48} \\
 10 \overline{) 12} (1 \\
 \underline{-10} \\
 2 \overline{) 10} (5 \\
 \underline{-10} \\
 0
 \end{array}$$

\therefore The HCF of 58 and 70 is 2.

Q11

Answer :

The given numbers are 399 and 437.

We have:

$$\begin{array}{r}
 1 \\
 399 \overline{) 437} \\
 \underline{-399} \\
 38 \overline{) 399} (10 \\
 \underline{-380} \\
 19 \overline{) 38} (2
 \end{array}$$

$$\begin{array}{r} 19 \overline{) 38} \\ -38 \\ \hline 0 \end{array}$$

∴ The HCF is 19.

Q12

Answer :

The given numbers are 1045 and 1520.

We have:

$$\begin{array}{r} 1 \\ 1045 \overline{) 1520} \\ -1045 \\ \hline 475 \end{array} \quad \begin{array}{r} 2 \\ 1045 \overline{) 475} \\ -950 \\ \hline 0 \end{array}$$

∴ The HCF of 1045 and 1520 is 95.

Q13

Answer :

The given numbers are 1965 and 2096.

We have:

$$\begin{array}{r} 1 \\ 1965 \overline{) 2096} \\ -1965 \\ \hline 131 \end{array} \quad \begin{array}{r} 15 \\ 1965 \overline{) 131} \\ -1965 \\ \hline 0 \end{array}$$

∴ The HCF is 131.

Q14

Q14

Answer :

The given numbers are 2241 and 2341.

We have:

$$\begin{array}{r} 1 \\ 2241 \overline{) 2324} \\ \underline{-2241} \\ 83 \overline{) 2241} (27 \\ \underline{-2241} \\ 0 \end{array}$$

$\therefore \text{HCF} = 83$

Q15

Answer :

The given numbers are 658, 940 and 1128.

First we will find the HCF of 658 and 940.

$$\begin{array}{r}
 1 \\
 658 \overline{) 940} \\
 \underline{-658} \\
 282 \overline{) 658} \quad (2 \\
 \underline{-564} \\
 94 \overline{) 282} \quad (3 \\
 \underline{-282} \\
 0
 \end{array}$$

Thus, the HCF of 658 and 940 is 94.

Now, we will find the HCF of 94 and 1128.

$$\begin{array}{r}
 1 \\
 94 \overline{) 1128} \\
 \underline{-1128} \\
 0
 \end{array}$$

Thus, the HCF of 94 and 1128 is 94.

\therefore The HCF of 658, 940 and 1128 is 94.

Q16

Answer :

The given numbers are 754, 1508 and 1972.

First, we will find the HCF of 754 and 1508.

$$\begin{array}{r}
 2 \\
 754 \overline{) 1508} \\
 \underline{-1508} \\
 0
 \end{array}$$

So, the HCF of 754 and 1508 is 754.

Now, we will find the HCF of 754 and 1972.

$$\begin{array}{r}
 2 \\
 754 \overline{) 1972} \\
 \underline{-1508} \\
 464
 \end{array}$$

$$\begin{array}{r}
 464 \overline{) 754} (1 \\
 \underline{-464} \\
 290 \overline{) 464} (1 \\
 \underline{-290} \\
 174 \overline{) 290} (1 \\
 \underline{-174} \\
 116 \overline{) 174} (1 \\
 \underline{-116} \\
 58 \overline{) 116} (2 \\
 \underline{-116} \\
 0
 \end{array}$$

So, the HCF of 754 and 1972 is 58.

\therefore The HCF of 754, 1058 and 1972 is 58.

Q17

Answer :

The given numbers are 391, 425 and 527.

First, we will find the HCF of 391 and 425.

$$\begin{array}{r}
 1 \\
 391 \overline{) 425} \\
 \underline{391} \\
 34 \overline{) 391} (11 \\
 \underline{-374} \\
 17 \overline{) 34} (2 \\
 \underline{-34} \\
 0
 \end{array}$$

So, the HCF of 391 and 425 is 17.

Now, we will find the HCF of 17 and 527.

$$\begin{array}{r}
 30 \\
 17 \overline{) 527} \\
 \underline{510} \\
 17 \overline{) 17} (1 \\
 \underline{-17} \\
 0
 \end{array}$$

So, the HCF of 17 and 527 is 17.

∴ The HCF of 391, 425 and 527 is 17.

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