

Exercise 2D

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 Required HCF = $19 \times 7 = 133$

Q10

Answer:

We have:

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

: The HCF of 58 and 70 is 2.

Q11

Answer:

The given numbers are 399 and 437.

We have:

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

$$\frac{-38}{0}$$

: The HCF is 19.

Q12

Answer:

The given numbers are 1045 and 1520.

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

.. The HCF of 1045 and 1520 is 95.

Q13

Answer:

The given numbers are 1965 and 2096.

We have:

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

:. The HCF is 131.

A 3 3

Answer:

The given numbers are 2241and 2341. We have:

$$\begin{array}{r}
1 \\
2241 \overline{\smash{\big)}\,2324} \\
-2241 \\
\hline
83 \overline{\smash{\big)}\,2241} (27 \\
-2241 \\
\hline
0
\end{array}$$

Q15

Answer:

The given numbers are 658, 940 and 1128.

First we will find the HCF of 658 and 940.

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

Thus, the HCF of 658 and 940 is 94.

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

$$\begin{array}{r}
1 \\
94 \overline{\smash{\big)}\, 1128} \\
-1128 \\
\hline
0
\end{array}$$

Thus, the HCF of 94 and 1128 is 94.

:. 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.

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

So, the HCF of 754 and 1508 is 754.

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

So, the HCF of 754 and 1972 is 58.

:. 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.

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

So, the HCF of 391 and 425 is 17. Now, we will find the HCF of 17 and 527.

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

So, the HCF of 17 and 527 is 17.

.. The HCF of 391, 425 and 527 is 17.

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