



Exercise 2C

Q12

Answer :

We will use the division method as shown below:

$$3 \overline{) 1323}$$

$$3 \overline{) 441}$$

$$3 \overline{) 147}$$

$$7 \overline{) 49}$$

$$7 \overline{) 7}$$

1

$$\begin{aligned}\therefore 1323 &= 3 \times 3 \times 3 \times 7 \times 7 \times 1 \\ &= 3^3 \times 7^2\end{aligned}$$

Q13

Answer :

We will use the division method as shown below:

$$2 \overline{) 8712}$$

$$2 \overline{) 4356}$$

$$2 \overline{) 2178}$$

$$3 \overline{) 1089}$$

$$3 \overline{) 363}$$

$$11 \overline{) 121}$$

$$11 \overline{) 11}$$

1

$$\begin{aligned}\therefore 8712 &= 2 \times 2 \times 2 \times 3 \times 3 \times 11 \times 11 \\ &= 2^3 \times 3^2 \times 11^2\end{aligned}$$

Q14

Answer :

Answer :

We will use the division method as shown below:

$$7 \overline{) 9317}$$

$$11 \overline{) 1331}$$

$$11 \overline{) 121}$$

$$11 \overline{) 11}$$

$$1$$

$$\begin{aligned}\therefore 9317 &= 7 \times 11 \times 11 \times 11 \\ &= 7 \times 11^3\end{aligned}$$

Q15

Answer :

We will use the division method as shown below:

$$\begin{array}{r} 3 \overline{) 1035} \\ 3 \overline{) 345} \\ 5 \overline{) 115} \\ 23 \overline{) 23} \\ 1 \end{array}$$

$$\begin{aligned} \therefore 1035 &= 3 \times 3 \times 5 \times 23 \\ &= 3^2 \times 5 \times 23 \end{aligned}$$

Q16

Answer :

We will use the division method as shown below:

$$\begin{array}{r} 3 \overline{) 1197} \\ 3 \overline{) 399} \\ 7 \overline{) 133} \\ 19 \overline{) 19} \\ 1 \end{array}$$

$$\begin{aligned} \therefore 1197 &= 3 \times 3 \times 7 \times 19 \\ &= 3^2 \times 7 \times 19 \end{aligned}$$

Q17

Answer :

We will use the division method as shown below:

$$\begin{array}{r} 3 \overline{) 4641} \\ 7 \overline{) 1547} \\ 13 \overline{) 221} \\ 17 \overline{) 17} \\ 1 \end{array}$$

$$\therefore 4641 = 3 \times 7 \times 13 \times 17$$

Q18

Answer :

We will use the division method as shown below:

$$\begin{array}{r} 3 \overline{) 4335} \\ 5 \overline{) 1445} \\ 17 \overline{) 289} \\ 17 \overline{) 17} \\ 1 \end{array}$$
$$\therefore 4335 = 3 \times 5 \times 17 \times 17$$
$$= 3 \times 5 \times 17^2$$

Q19

Answer :

We will use the division method as shown below:

$$\begin{array}{r} 3 \overline{) 2907} \\ 3 \overline{) 969} \\ 17 \overline{) 323} \\ 19 \overline{) 19} \\ 1 \end{array}$$
$$\therefore 2907 = 3 \times 3 \times 17 \times 19$$
$$= 3^2 \times 17 \times 19$$

Q20

Answer :

We will use the division method as shown below:

$$\begin{array}{r} 5 \overline{) 13915} \\ 11 \overline{) 2783} \\ 11 \overline{) 253} \\ 23 \overline{) 23} \\ 1 \end{array}$$
$$\therefore 13915 = 5 \times 11 \times 11 \times 23$$
$$= 5 \times 11^2 \times 23$$

*****END*****