



Exercise 4A

The cube of an odd number is an odd number. Therefore, 125, 343 and 9261 are the cubes of odd numbers.

$$125 = 5 \times 5 \times 5 = 5^3$$

$$343 = 7 \times 7 \times 7 = 7^3$$

$$9261 = 3 \times 3 \times 3 \times 7 \times 7 \times 7 = 3^3 \times 7^3 = 21^3$$

Q7

Answer :

1323

$$\begin{array}{r|l}
 3 & 1323 \\
 \hline
 3 & 441 \\
 \hline
 3 & 147 \\
 \hline
 7 & 49 \\
 \hline
 7 & 7 \\
 \hline
 & 1
 \end{array}$$

$$1323 = 3 \times 3 \times 3 \times 7 \times 7.$$

To make it a perfect cube, it has to be multiplied by 7.

Q8

Answer :

2560

2560 can be expressed as the product of prime factors in the following manner:

$$\begin{array}{r|l}
 2 & 2560 \\
 \hline
 2 & 1280 \\
 \hline
 2 & 640 \\
 \hline
 2 & 320 \\
 \hline
 2 & 160 \\
 \hline
 2 & 80 \\
 \hline
 2 & 40 \\
 \hline
 2 & 20 \\
 \hline
 2 & 10 \\
 \hline
 5 & 5 \\
 \hline
 & 1
 \end{array}$$

$$2560 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 5$$

To make this a perfect square, we have to multiply it by 5×5 .

Therefore, 2560 should be multiplied by 25 so that the product is a perfect cube.

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