



Exercise 4A

Q9

Answer :

1600

1600 can be expressed as the product of prime factors in the following manner:

$$\begin{array}{r|l} 2 & 1600 \\ \hline 2 & 800 \\ \hline 2 & 400 \\ \hline 2 & 200 \\ \hline 2 & 100 \\ \hline 2 & 50 \\ \hline 5 & 25 \\ \hline 5 & 5 \\ \hline & 1 \end{array}$$

$$1600 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 5 \times 5$$

Therefore, to make the quotient a perfect cube, we have to divide 1600 by:

$$5 \times 5 = 25$$

Q10

Answer :

2		8788
<hr/>		
2		4394
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13		2197
<hr/>		
13		169
<hr/>		
13		13
<hr/>		
		1

8788

8788 can be expressed as the product of prime factors as $2 \times 2 \times 13 \times 13 \times 13$.
Therefore, 8788 should be divided by 4, i.e. (2×2) , so that the quotient is a perfect cube.

***** END *****