

18.10.2019
STD: VIII

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TT - MATHS

Marks: 20
Time: 40min

1. $144 - 1 = 143$ $143 - 3 = 140$ $140 - 5 = 135$
 $135 - 7 = 128$ $128 - 9 = 119$ $119 - 11 = 108$
 $108 - 13 = 95$ $95 - 15 = 80$ $80 - 17 = 63$
 $63 - 19 = 44$ $44 - 21 = 23$ $23 - 23 = 0$

$$\sqrt{144} = 12$$

2. a) 576 b) 2025

$$\begin{array}{r} 2 \overline{)576} \\ 2 \overline{)288} \\ 2 \overline{)144} \\ 2 \overline{)72} \\ 2 \overline{)36} \\ 2 \overline{)18} \\ 3 \overline{)9} \\ 3 \overline{)3} \\ 1 \end{array}$$

$$2 \ 2 \ 2 \ 2 \ 2 \ 3 \ 3$$

$$\sqrt{576} = 2 \times 2 \times 2 \times 3$$

$$\sqrt{576} = 24$$

$$\begin{array}{r} 5 \overline{)2025} \\ 5 \overline{)405} \\ 3 \overline{)81} \\ 3 \overline{)27} \\ 3 \overline{)9} \\ 3 \overline{)3} \\ 3 \ 1 \end{array}$$

$$2025 = 5 \ 5 \ 3 \ 3 \ 3 \ 3$$

$$\rightarrow \sqrt{2025} = 5 \times 3 \times 3$$

$$\rightarrow \sqrt{2025} = 45$$

3.
$$\begin{array}{r} 2 \overline{)1280} \\ 2 \overline{)640} \\ 2 \overline{)320} \\ 2 \overline{)160} \\ 2 \overline{)80} \\ 2 \overline{)40} \\ 2 \overline{)20} \\ 2 \overline{)10} \\ 5 \overline{)5} \\ 1 \end{array}$$

4. Let no of student be x each donated be ₹x.

$$= \text{Total donation} = x \times x$$

$$= 1225 = x^2$$

$$= \sqrt{1225} = x$$

$$\begin{array}{r} 5 \overline{)1225} \\ 5 \overline{)245} \\ 7 \overline{)49} \\ 7 \overline{)7} \end{array}$$

$$1 \quad \therefore \text{No of students} = 35$$

$$\sqrt{1225} = 5 \times 7 = \sqrt{1225} = 35$$

Hence 5 has no pair so
5 has to be multiplied to get perfect
square number. $1280 \times 5 = 6400 = \sqrt{6400} = 80$