H-W

3.9.2021

2. Find LCM of numbers by Prime factorization method

a) 16, 48

$$\begin{array}{r|l} 2 & 16, 48 \\ \hline 2 & 8, 24 \\ \hline & 4, 12 \end{array}$$

LCM = 2 × 2 × 2 × 4 × 7 = 32

b) 8, 12, 16

$$\begin{array}{r|l} 2 & 8, 12, 16 \\ \hline 2 & 4, 6, 8 \\ \hline & 2, 3, 4 \end{array}$$

LCM = 2 × 2 × 2 × 3 × 4 = 96

c) 20, 25

$$\begin{array}{r|l} 5 & 20, 25 \\ \hline & 4, 5 \end{array}$$

LCM = 5 × 5 × 4 = 100

d) 40; 50

| | |
|---|---|
| 2 | 40, 50 |
| 5 | 20, 25 |
| | 4, 5 |

LCM = 2×5×5×4 = 200

e) 56; 64

| | |
|---|---|
| 2 | 56, 64 |
| 2 | 28, 32 |
| 2 | 14, 16 |
| | 7, 8 |

LCM = 2×2×2×7×8 = 448

f) 96, 144

| | |
|---|---|
| 2 | 96, 144 |
| 2 | 48, 72 |
| 2 | 24, 36 |
| 2 | 12, 18 |
| 3 | 6, 9 |
| | 2, 3 |

LCM = 2×2×2×2×3×2×3 = 288

8) 36, 42

$$\begin{array}{r|l} 2 & 36, 42 \\ \hline 3 & 18, 21 \\ \hline & 6, 7 \end{array}$$

LCM = 2 × 3 × 6 × 7 = 252

4) 15, 64

15, 64

LCM = 960

2. Find the LCM of the no. by Prime factorizati method

i) 15, 45

| | |
|---|---|
| 5 | 15, 45 |
| 3 | 3, 9 |
| | 1, 3 |

LCM = 5 × 3 × 7 × 3 = 45

j) 10, 20, 30

| | |
|---|---|
| 2 | 10, 20, 30 |
| 5 | 5, 10, 15 |
| | 1, 2, 3 |

LCM = 2 × 2 × 3 × 5 × 1 = 60