

Least Common Multiple (C)

Name: _____

Date: _____

Determine the least common multiple using the prime factors of each number.

1. 50 =

60 =

LCM =

2. 84 =

81 =

LCM =

3. 45 =

95 =

LCM =

4. 80 =

72 =

LCM =

5. 88 =

32 =

LCM =

6. 56 =

40 =

LCM =

7. 98 =

60 =

LCM =

8. 38 =

92 =

LCM =

9. 94 =

58 =

LCM =

10. 38 =

62 =

LCM =

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Name: _____

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Determine the least common multiple using the prime factors of each number.

$$\begin{aligned} 1. \quad 50 &= 2 \times 5^2 \\ 60 &= 2^2 \times 3 \times 5 \\ \text{LCM} &= 2^2 \times 3 \times 5^2 \\ &= 300 \end{aligned}$$

$$\begin{aligned} 2. \quad 84 &= 2^2 \times 3 \times 7 \\ 81 &= 3^4 \\ \text{LCM} &= 2^2 \times 3^4 \times 7 \\ &= 2268 \end{aligned}$$

$$\begin{aligned} 3. \quad 45 &= 3^2 \times 5 \\ 95 &= 5 \times 19 \\ \text{LCM} &= 3^2 \times 5 \times 19 \\ &= 855 \end{aligned}$$

$$\begin{aligned} 4. \quad 80 &= 2^4 \times 5 \\ 72 &= 2^3 \times 3^2 \\ \text{LCM} &= 2^4 \times 3^2 \times 5 \\ &= 720 \end{aligned}$$

$$\begin{aligned} 5. \quad 88 &= 2^3 \times 11 \\ 32 &= 2^5 \\ \text{LCM} &= 2^5 \times 11 \\ &= 352 \end{aligned}$$

$$\begin{aligned} 6. \quad 56 &= 2^3 \times 7 \\ 40 &= 2^3 \times 5 \\ \text{LCM} &= 2^3 \times 5 \times 7 \\ &= 280 \end{aligned}$$

$$\begin{aligned} 7. \quad 98 &= 2 \times 7^2 \\ 60 &= 2^2 \times 3 \times 5 \\ \text{LCM} &= 2^2 \times 3 \times 5 \times 7^2 \\ &= 2940 \end{aligned}$$

$$\begin{aligned} 8. \quad 38 &= 2 \times 19 \\ 92 &= 2^2 \times 23 \\ \text{LCM} &= 2^2 \times 19 \times 23 \\ &= 1748 \end{aligned}$$

$$\begin{aligned} 9. \quad 94 &= 2 \times 47 \\ 58 &= 2 \times 29 \\ \text{LCM} &= 2 \times 29 \times 47 \\ &= 2726 \end{aligned}$$

$$\begin{aligned} 10. \quad 38 &= 2 \times 19 \\ 62 &= 2 \times 31 \\ \text{LCM} &= 2 \times 19 \times 31 \\ &= 1178 \end{aligned}$$