

Least Common Multiple (B)

Name: _____

Date: _____

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

1. 6 =

22 =

LCM =

2. 16 =

14 =

LCM =

3. 14 =

24 =

LCM =

4. 14 =

8 =

LCM =

5. 14 =

22 =

LCM =

6. 6 =

9 =

LCM =

7. 16 =

24 =

LCM =

8. 18 =

21 =

LCM =

9. 22 =

18 =

LCM =

10. 21 =

15 =

LCM =

Least Common Multiple (B)

Name: _____

Date: _____

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

$$\begin{aligned} 1. \quad 6 &= 2 \times 3 \\ 22 &= 2 \times 11 \\ \text{LCM} &= 2 \times 3 \times 11 \\ &= 66 \end{aligned}$$

$$\begin{aligned} 2. \quad 16 &= 2^4 \\ 14 &= 2 \times 7 \\ \text{LCM} &= 2^4 \times 7 \\ &= 112 \end{aligned}$$

$$\begin{aligned} 3. \quad 14 &= 2 \times 7 \\ 24 &= 2^3 \times 3 \\ \text{LCM} &= 2^3 \times 3 \times 7 \\ &= 168 \end{aligned}$$

$$\begin{aligned} 4. \quad 14 &= 2 \times 7 \\ 8 &= 2^3 \\ \text{LCM} &= 2^3 \times 7 \\ &= 56 \end{aligned}$$

$$\begin{aligned} 5. \quad 14 &= 2 \times 7 \\ 22 &= 2 \times 11 \\ \text{LCM} &= 2 \times 7 \times 11 \\ &= 154 \end{aligned}$$

$$\begin{aligned} 6. \quad 6 &= 2 \times 3 \\ 9 &= 3^2 \\ \text{LCM} &= 2 \times 3^2 \\ &= 18 \end{aligned}$$

$$\begin{aligned} 7. \quad 16 &= 2^4 \\ 24 &= 2^3 \times 3 \\ \text{LCM} &= 2^4 \times 3 \\ &= 48 \end{aligned}$$

$$\begin{aligned} 8. \quad 18 &= 2 \times 3^2 \\ 21 &= 3 \times 7 \\ \text{LCM} &= 2 \times 3^2 \times 7 \\ &= 126 \end{aligned}$$

$$\begin{aligned} 9. \quad 22 &= 2 \times 11 \\ 18 &= 2 \times 3^2 \\ \text{LCM} &= 2 \times 3^2 \times 11 \\ &= 198 \end{aligned}$$

$$\begin{aligned} 10. \quad 21 &= 3 \times 7 \\ 15 &= 3 \times 5 \\ \text{LCM} &= 3 \times 5 \times 7 \\ &= 105 \end{aligned}$$