

Least Common Multiple (H)

Name: _____

Date: _____

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

1. 21 =

36 =

LCM =

2. 56 =

91 =

LCM =

3. 25 =

95 =

LCM =

4. 40 =

85 =

LCM =

5. 36 =

44 =

LCM =

6. 12 =

64 =

LCM =

7. 8 =

28 =

LCM =

8. 24 =

93 =

LCM =

9. 95 =

76 =

LCM =

10. 78 =

24 =

LCM =

Least Common Multiple (H)

Name: _____

Date: _____

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

1. $21 = 3 \times 7$

$$36 = 2^2 \times 3^2$$

$$\begin{aligned}\text{LCM} &= 2^2 \times 3^2 \times 7 \\ &= 252\end{aligned}$$

2. $56 = 2^3 \times 7$

$$91 = 7 \times 13$$

$$\begin{aligned}\text{LCM} &= 2^3 \times 7 \times 13 \\ &= 728\end{aligned}$$

3. $25 = 5^2$

$$95 = 5 \times 19$$

$$\begin{aligned}\text{LCM} &= 5^2 \times 19 \\ &= 475\end{aligned}$$

4. $40 = 2^3 \times 5$

$$85 = 5 \times 17$$

$$\begin{aligned}\text{LCM} &= 2^3 \times 5 \times 17 \\ &= 680\end{aligned}$$

5. $36 = 2^2 \times 3^2$

$$44 = 2^2 \times 11$$

$$\begin{aligned}\text{LCM} &= 2^2 \times 3^2 \times 11 \\ &= 396\end{aligned}$$

6. $12 = 2^2 \times 3$

$$64 = 2^6$$

$$\begin{aligned}\text{LCM} &= 2^6 \times 3 \\ &= 192\end{aligned}$$

7. $8 = 2^3$

$$28 = 2^2 \times 7$$

$$\begin{aligned}\text{LCM} &= 2^3 \times 7 \\ &= 56\end{aligned}$$

8. $24 = 2^3 \times 3$

$$93 = 3 \times 31$$

$$\begin{aligned}\text{LCM} &= 2^3 \times 3 \times 31 \\ &= 744\end{aligned}$$

9. $95 = 5 \times 19$

$$76 = 2^2 \times 19$$

$$\begin{aligned}\text{LCM} &= 2^2 \times 5 \times 19 \\ &= 380\end{aligned}$$

10. $78 = 2 \times 3 \times 13$

$$24 = 2^3 \times 3$$

$$\begin{aligned}\text{LCM} &= 2^3 \times 3 \times 13 \\ &= 312\end{aligned}$$