Answer Key · Lesson 2.6: Least Common Multiple

School Launch · Pre-Algebra · Unit 2 · Worksheet A · for the parent

Key

1. 12

Find the least common multiple of 4 and 12.

2. 18

Find the least common multiple of 9 and 18.

3. 16

Find the least common multiple of 8 and 16.

4. 60

1. $\text{LCM} = \dfrac{15 \times 4}{\gcd(15, 4)} = \dfrac{60}{1}$

Find the least common multiple of 15 and 4.

5. 24

1. $\text{LCM} = \dfrac{6 \times 8}{\gcd(6, 8)} = \dfrac{48}{2}$

Find the least common multiple of 6 and 8.

6. 42

1. $\text{LCM} = \dfrac{6 \times 7}{\gcd(6, 7)} = \dfrac{42}{1}$

Find the least common multiple of 6 and 7.

7. 112

1. $\text{LCM} = \dfrac{14 \times 16}{\gcd(14, 16)} = \dfrac{224}{2}$

Find the least common multiple of 14 and 16.

8. 120 seconds

1. The answer is the least common multiple.
2. $\text{LCM}(10, 8, 12) = 120$

Abigail rings three church bells: one every 10 seconds, one every 8 seconds and one every 12 seconds. They ring together now. After how many seconds will all three next ring together?

9. 30 seconds

1. The answer is the least common multiple.
2. $\text{LCM}(15, 10, 10) = 30$

Caleb rings three church bells: one every 15 seconds, one every 10 seconds and one every 10 seconds. They ring together now. After how many seconds will all three next ring together?

10. 840 seconds

1. The answer is the least common multiple.
2. $\text{LCM}(7, 15, 8) = 840$

Samuel rings three church bells: one every 7 seconds, one every 15 seconds and one every 8 seconds. They ring together now. After how many seconds will all three next ring together?