

1.6 Least Common Multiple

EQ: How can you find the least common multiple of two numbers?

★ Multiple sounds like multiplication. Multiples are bigger than the original number.

EX: Multiples of 10

$$\begin{array}{l} 10 \times 1 = 10 \\ 10 \times 2 = 20 \\ 10 \times 3 = 30 \\ 10 \times 4 = 40 \end{array} \left. \vphantom{\begin{array}{l} 10 \times 1 = 10 \\ 10 \times 2 = 20 \\ 10 \times 3 = 30 \\ 10 \times 4 = 40 \end{array}} \right\} \begin{array}{l} \text{multiples} \\ \text{of } 10 \end{array}$$

Example 1: Find the LCM of 10 + 15

$$\begin{array}{r|rrrrr} 10 & 10 & 20 & 30 & 40 & 50 \\ \hline 15 & 15 & & 30 & 45 & \end{array}$$

LCM = 30

Example 2: 16, 20

$$\begin{array}{r|rrrrr} 16 & 16 & 32 & 48 & 64 & 80 \\ \hline 20 & 20 & 40 & 60 & 80 & 100 \end{array}$$

LCM = 80

Summary: