

Exercise 17

In the following exercises, find the least common multiple of each pair of numbers using the prime factors method.

$$55, 88$$

Solution

Find the prime factorization of 55.

$$55 = 5 \times 11$$

Find the prime factorization of 88.

$$\begin{aligned} 88 &= 2 \times 44 \\ &= 2 \times 2 \times 22 \\ &= 2 \times 2 \times 2 \times 11 \end{aligned}$$

The number that has all factors from both numbers is $2 \times 2 \times 2 \times 5 \times 11 = 440$, so this is the least common multiple.