

Exercise 10

In the following exercises, find the prime factorization.

$$400$$

Solution

400 is an even number, so one of its factors is 2.

$$\begin{aligned}400 &= 2 \times 200 \\ &= 2 \times 2 \times 100 \\ &= 2 \times 2 \times 2 \times 50 \\ &= 2 \times 2 \times 2 \times 2 \times 25 \\ &= 2 \times 2 \times 2 \times 2 \times 5 \times 5\end{aligned}$$