

## Exercise 11

In the following exercises, find the prime factorization.

$$432$$

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### Solution

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

$$\begin{aligned}432 &= 2 \times 216 \\ &= 2 \times 2 \times 108 \\ &= 2 \times 2 \times 2 \times 54 \\ &= 2 \times 2 \times 2 \times 6 \times 9 \\ &= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3\end{aligned}$$