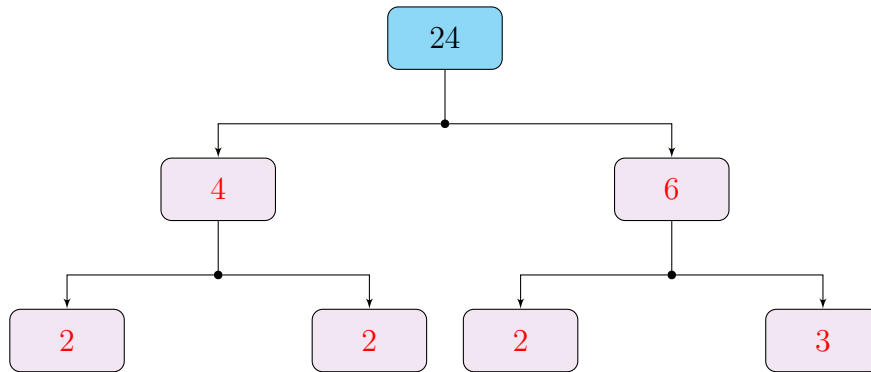


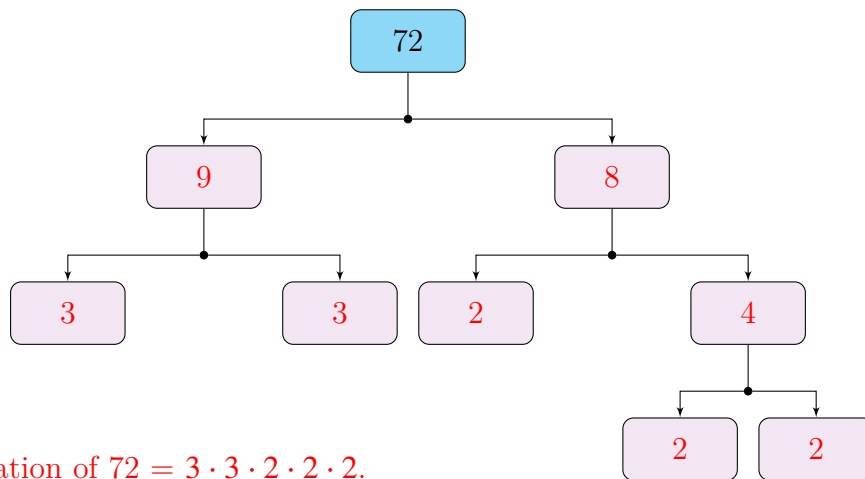
## 1.8. Prime and Composite Numbers

**Problem 1:** Find all the prime numbers (factors) for number 24.



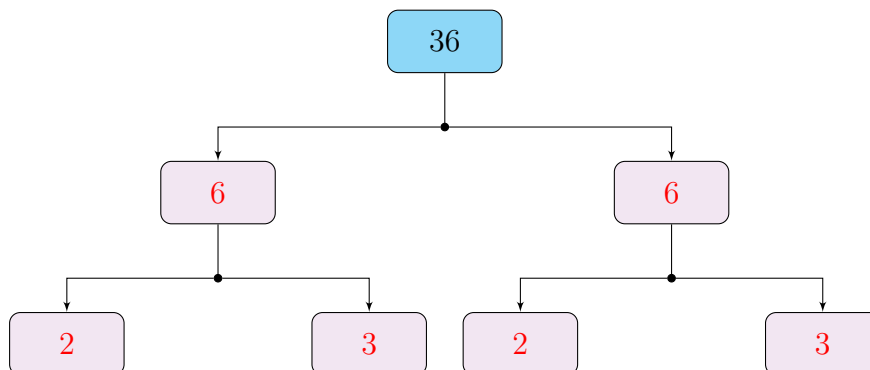
The prime factors of 24 are  $2 \times 2 \times 2 \times 3$ .

**Problem 2:** Find all the prime numbers (factors) for number 72.



The prime factorization of  $72 = 3 \cdot 3 \cdot 2 \cdot 2 \cdot 2$ .

**Problem 3:** Find all the prime numbers (factors) for number 36.



The prime factorization of 36 is  $2 \times 2 \times 3 \times 3$ .

**Problem 4:** Split numbers into prime factors.

$$\begin{array}{r|l} \text{a) } 140 & 2 \\ 70 & 2 \\ 35 & 5 \\ 7 & 7 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{b) } 125 & 5 \\ 25 & 5 \\ 5 & 5 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{c) } 156 & 2 \\ 78 & 2 \\ 39 & 3 \\ 13 & 13 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{d) } 144 & 2 \\ 72 & 2 \\ 36 & 2 \\ 18 & 2 \\ 9 & 3 \\ 3 & 3 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{e) } 156 & 2 \\ 78 & 2 \\ 39 & 3 \\ 13 & 13 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{f) } 130 & 2 \\ 65 & 5 \\ 13 & 13 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{g) } 136 & 2 \\ 68 & 2 \\ 34 & 2 \\ 17 & 17 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{h) } 76 & 2 \\ 38 & 2 \\ 19 & 19 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{i) } 102 & 2 \\ 51 & 3 \\ 17 & 17 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{j) } 90 & 2 \\ 45 & 3 \\ 15 & 3 \\ 5 & 5 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{k) } 120 & 2 \\ 60 & 2 \\ 30 & 2 \\ 15 & 3 \\ 5 & 5 \\ 1 & \end{array}$$

$$\begin{array}{r|l} \text{l) } 156 & 2 \\ 78 & 2 \\ 39 & 3 \\ 13 & 13 \\ 1 & \end{array}$$