

Scomposizione di un numero in fattori primi

Cosa significa? **Scrivere il numero sotto forma di moltiplicazione di numeri primi**

$$\text{Es } 6 = 2 \cdot 3$$

$$15 = 3 \cdot 5$$

Come si scompone un numero in fattori primi? **Dividendolo successivamente per i suoi divisori**

$$\text{Es } 12:2=6 \rightarrow 6:2=3 \rightarrow 3:3=1$$

$$18:2=9 \rightarrow 9:3=3 \rightarrow 3:3=1$$

I numeri primi si dividono per se stessi

$$5:5=1$$

$$7:7=1$$

$$11:11=1$$

Il calcolo si dispone come segue

$$\begin{array}{r} 12 \mid 2 \\ 6 \mid 2 \\ 3 \mid 3 \\ 1 \mid \end{array} \quad \begin{array}{l} \text{quindi risulta} \\ \text{e si scrive cos\`i} \end{array} \quad \begin{array}{l} 12 = 2 \cdot 2 \cdot 3 \\ 12 = 2^2 \cdot 3 \end{array}$$

$$\begin{array}{r} 18 \mid 2 \\ 9 \mid 3 \\ 3 \mid 3 \\ 1 \mid \end{array} \quad \begin{array}{l} 18 = 2 \cdot 3 \cdot 3 \\ 18 = 2 \cdot 3^2 \end{array}$$

Di seguito le scomposizioni di alcuni numeri

$$\begin{array}{r} 4 \mid 2 \\ 2 \mid 2 \\ 1 \mid \end{array} \quad 4 = 2^2$$

$$\begin{array}{r} 6 \mid 2 \\ 3 \mid 3 \\ 1 \mid \end{array} \quad 6 = 2 \cdot 3$$

$$\begin{array}{r} 8 \mid 2 \\ 4 \mid 2 \\ 2 \mid 2 \\ 1 \mid \end{array} \quad 8 = 2^3$$

$$\begin{array}{r} 14 \mid 2 \\ 7 \mid 7 \\ 1 \mid \end{array} \quad 14 = 2 \cdot 7$$

$$\begin{array}{r} 15 \mid 3 \\ 5 \mid 5 \\ 1 \mid \end{array} \quad 15 = 3 \cdot 5$$

$$\begin{array}{r} 20 \mid 2 \\ 10 \mid 2 \\ 5 \mid 5 \\ 1 \mid \end{array} \quad 20 = 2^2 \cdot 5$$

$$\begin{array}{r} 21 \mid 3 \\ 7 \mid 7 \\ 1 \mid \end{array} \quad 21 = 3 \cdot 7$$

$$\begin{array}{r} 22 \mid 2 \\ 11 \mid 11 \\ 1 \mid \end{array} \quad 22 = 2 \cdot 11$$

$$\begin{array}{r} 24 \mid 2 \\ 12 \mid 2 \\ 6 \mid 2 \\ 3 \mid 3 \\ 1 \mid \end{array} \quad 24 = 2^3 \cdot 3$$

$$\begin{array}{r} 25 \mid 5 \\ 5 \mid 5 \\ 1 \mid \end{array} \quad 25 = 5^2$$

$$\begin{array}{r} 26 \mid 2 \\ 13 \mid 13 \\ 1 \mid \end{array} \quad 26 = 2 \cdot 13$$

$$\begin{array}{r} 27 \mid 3 \\ 9 \mid 3 \\ 3 \mid 3 \\ 1 \mid \end{array} \quad 27 = 3^3$$

$$\begin{array}{r} 28 \mid 2 \\ 14 \mid 2 \\ 7 \mid 7 \\ 1 \mid \end{array} \quad 28 = 2^2 \cdot 7$$

$$\begin{array}{r} 29 \mid 29 \\ 1 \mid \end{array} \quad 29 = 29$$

$$\begin{array}{r} 30 \mid 2 \\ 15 \mid 3 \\ 5 \mid 5 \\ 1 \mid \end{array} \quad 30 = 2 \cdot 3 \cdot 5$$

$$\begin{array}{r} 31 \mid 31 \\ 1 \mid \end{array} \quad 31 = 31$$

$$\begin{array}{r} 32 \mid 2 \\ 16 \mid 2 \\ 8 \mid 2 \\ 4 \mid 2 \\ 2 \mid 2 \\ 1 \mid \end{array} \quad 32 = 2^5$$

$$\begin{array}{r} 33 \mid 3 \\ 11 \mid 11 \\ 1 \mid \end{array} \quad 33 = 3 \cdot 11$$

$$\begin{array}{r} 34 \mid 2 \\ 17 \mid 17 \\ 1 \mid \end{array} \quad 34 = 2 \cdot 17$$

$$\begin{array}{r} 35 \mid 5 \\ 7 \mid 7 \\ 1 \mid \end{array} \quad 35 = 5 \cdot 7$$