

Q: 12, 15, 18 的 最大公因数

$$\begin{aligned} 12 &= 2 \times 2 \times 3 \\ 15 &= 3 \times 5 \\ 18 &= 2 \times 3 \times 3 \end{aligned}$$

$$\text{gcd}(12, 15, 18) = 3$$

$$\text{lcm}(12, 15, 18) = 2^2 \times 3^1 \times 5^1 \times 3$$

$$\text{gcd}(12, 15, 18) \cdot \text{lcm}(12, 15, 18)$$

$$= (3) \times (2^2 \times 3 \times 5 \times 3)$$

求法 (gcd)

$$\begin{array}{r} 3 \overline{) 12, 15, 18} \\ \underline{4, 5, 6} \end{array}$$

4, 5, 6 三数互质 0

正确 4, 5, 6 两两互质 X

求 lcm

$$\begin{array}{r} 3 \overline{) 12, 15, 18} \\ \underline{4, 5, 6} \\ 3 \times 2 \times 2 \times 5 \times 3 \\ \hline 2, 5, 3 \end{array}$$

lcm