



最小公倍數和最大公因數 (二) L.C.M. and H.C.F. (II)



填空：

Fill in the blanks:

① a) 列出6的首十個倍數：

List the first 10 multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

b) 列出9的首十個倍數：

List the first 10 multiples of 9: 9, 18, 27, 36, 45, 54, 63, 72, 81, 90

c) 6和9的公倍數：

The common multiples of 6 and 9: 18, 36, 54

d) 6和9的最小公倍數：

The L.C.M. of 6 and 9: 18

e) 6和9的所有公倍數都是最小公倍數的 倍數 (因數/倍數)。

All common multiples of 6 and 9 are multiples (factors/multiples) of their L.C.M..

f) 6和9的第八個公倍數是 144。

The 8th common multiple of 6 and 9 is 144.

計算：

Calculating:

① 12和20的L.C.M.

The L.C.M. of 12 and 20 = 60

$$\begin{array}{r} 4 \quad | \quad 12 \quad 20 \\ \quad \quad | \quad \quad | \\ \quad \quad 3 \quad \quad 5 \end{array}$$

② 10、16和40的L.C.M.

The L.C.M. of 10, 16 and 40 = 80

$$\begin{array}{r} 2 \quad | \quad 10 \quad 16 \quad 40 \\ \quad \quad | \quad \quad | \quad \quad | \\ \quad \quad 5 \quad \quad 8 \quad 20 \\ \quad \quad | \quad \quad | \quad \quad | \\ \quad \quad 1 \quad \quad 8 \quad 4 \\ \quad \quad | \quad \quad | \quad \quad | \\ \quad \quad 1 \quad \quad 2 \quad 1 \end{array}$$

填空：

Fill in the blanks:

① a) 列出12的因數：

List the factors of 12: 1, 2, 3, 4, 6, 12

b) 列出28的因數：

List the factors of 28: 1, 2, 4, 7, 14, 28

c) 12和28的公因數：

The common factors of 12 and 28: 1, 2, 4

d) 12和28的最大公因數：

The H.C.F. of 12 and 28: 4

e) 12和28的所有公因數都是最大公因數的因數（因數/倍數）。

All common factors of 12 and 28 are factors (factors/multiples) of their H.C.F..

計算：

Calculating:

① 17和23的H.C.F.

The H.C.F. of 17 and 23 = 1

$$\begin{array}{r} 1 \\ \hline 17 & 23 \\ 17 & 23 \end{array}$$

② 18和27的H.C.F.

The H.C.F. of 18 and 27 = 9

$$\begin{array}{r} 3 \\ \hline 18 & 27 \\ 3 \\ \hline 6 & 9 \\ 3 \\ \hline 2 & 3 \end{array}$$

③ 16、18和24的H.C.F.

The H.C.F. of 16, 18 and 24 = 2

$$\begin{array}{r} 2 \\ \hline 16 & 18 & 24 \\ 8 & 9 & 12 \end{array}$$

④ 16、18和24的L.C.M.

The L.C.M. of 16, 18 and 24 = 144

$$\begin{array}{r} 2 \\ \hline 16 & 18 & 24 \\ 2 \\ \hline 8 & 9 & 12 \\ 2 \\ \hline 4 & 9 & 6 \\ 3 \\ \hline 2 & 9 & 3 \\ 2 & 3 & 1 \end{array}$$