1．The tower shown at the right is made of unit cubes stuck to each other．The tower is lifted up and painted red on all its sides．If the unit cubes are then taken apart one by one，how many cube／s that made up the tower is／are not painted red on any of its sides？
右面的塔是由正方體單位互相堆劯而成。塔所有面已經漆上紅色。如果把正方體單位一個個拆開，求多少個一面紅色都沒有的正方體數量。


2．There are 2 red cars and 3 blue cars．The 5 cars contain a total of 12 people．No car has more than 4 people． Every car has at least 1 person．The only cars with the same number of people are the red cars．How many people are in 1 red car？
2 輛紅車及 3 輛藍車共坐 12 人。每車最多坐 4 人最少坐 1 人，若只有每輛紅車內的人數一樣，求每輛紅車人的數量。

3．A list contains exactly 6 different numbers．No number in the list is a multiple of any other in the list．What is the least possible total of these 6 numbers？
一列表有6數而當中每一個數皆非表中其他任何一個數的倍數。求該6個數的最小的和。

4．Tracy＇s Trophies charges by the letter for engraving．There is one for each vowel and a different fee for each consonant．CAROL costs $\$ 31$ to engrave．GABRIEL costs $\$ 43$ to engrave．How many dollars does BRIDGET cost to engrave？
（Vowels are a，e，i，o and $u$ ．Consonants are made up of alphabets b to z ，less the vowels ）特雷西的獎杯是按照雕刻的字母收費的。每個元音字母收費一樣而每個輔音字母收費不同。雕刻CAROL的費用為 31 ，雕刻 GABRIEL的費用為 43 ，問雕刻BRIDGET的費用是多少？

5．As shown，the $5 \times 5$＂checkerboard＂contains one shaded square．In this diagram，how many squares of any size do not include the shaded square？
求下圖不包括已塗黑的正方形的正方形數量。


6．Ashley＇s locker number is a three－digit multiple of 5．The tens digit is the sum of the hundreds digit and the ones digit．The sum of all three digits is 16 ．No digit is repeated．What is Ashley＇s locker number？艾利貯物箱的密碼為 3 位數並為 5 的倍數，十位數的位值為百位數和個位數位值的和。三個數字並無重複及三位數字之和為 160 ，求該 3 位數。

7．What is the least multiple of 9 that is greater than 150 ？
求大於 150 ，並可被 9 整除的最小整數。

8．What number between 104 and 140 is exactly divisible by 6 and exactly divisible by 15 ？ 104 及 140 之間那一個數可同時被 15 和 6 整除？

9．Michael has $\$ 5$ less than Samantha．Samantha has $\$ 10$ more than Rob．Rob has $\$ 15$ less than Hailey．How many more dollars does Hailey have than Michael？
米高比莎曼少 $\$ 5$ ；莎曼比羅拔多 $\$ 10$ ；羅拔比希莉少 $\$ 15$ 。希莉比米高多多少錢？

10．Lisa has a secret 3－digit number．No digit is 0 ．She says：
The hundreds digit is a multiple of 4 ．
The tens digit is a perfect square．
The ones digit is a multiple of 3 ．
The digits are in decreasing order．
What is Lisa＇s secret number？

利莎有一個 3 位密碼而三位位值皆非 0 。該些數值有以下特性；
百位數為4的倍數，十位數為平方數，個位數為3的倍數，該些數字以遞減排列。
求該密碼的值。

