

兩人一組做實驗，每回合兩組、兩組競爭、各自代表一家攤販供應早餐漢堡。在每回合當中，兩家攤販要同時決定他們設攤的**位置**以及供應漢堡的**價格**。可能的價格為 0, 1, 2, 3, ..., 50 元；可能的設攤位置取決於美食街上消費者的位置，美食街有九位消費者，所以可能的位置是 1 到 9 (如下圖)：

In this experiment, two students form a group, and two groups form a pair to participate in each round. Each group represents a breakfast stand selling hamburgers. Each group chooses the **location** of their stand and the **price** (\$0, 1, 2, 3, ..., 50). Possible locations one can choose coincide with consumer locations—there are nine consumers standing on the street, one each at location 1-9, so you can choose from 1-9 (see below):

|                  |   |   |   |   |   |   |   |                 |
|------------------|---|---|---|---|---|---|---|-----------------|
| 1 街頭 Street Head | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 巷尾 Street End |
|------------------|---|---|---|---|---|---|---|-----------------|

消費者可以自由決定去哪一家攤販購買早餐，但是還沒吃早餐之前就走路必須耗費走路工，每走一步路(比如說從位置 1 走到位置 2)花一元。如果消費者發現兩邊一樣遠，那他可以丟銅板決定去哪一家吃早餐。生產早餐漢堡的成本為零。因此，每家攤販的利潤就是他賣漢堡的總收入，而且取決於他能夠招攬多少消費者。您的利潤除以十就是您所獲得的分數。利潤越高，分數越高。Consumers can choose any stand to buy their breakfast, but need to pay a walking cost of \$1 for each block they are away from the stand (say to move from location 1 to location 2). They will randomize if they find two at equal distance. The production cost of hamburgers is \$0. Hence, the profit (=total revenue selling hamburgers) for each stand is determined by the amount consumers one attracts. Your grade is total profit divided by 10.

每回合政府管制攤販的規定都有所不同，因此請注意實驗者的政府公告：

There are different regulations in each round, so please pay attention to the announcements:

回合一：為保障窮學生，早餐漢堡的價格管制在十元。位置可任選，但選定後不得更改。

Round 1: To help poor students, hamburger price is fixed at \$10. Firms can choose location freely.

回合二：為整頓市容所有攤販必須集中在中間(位置 5)。價格則沒有限制(0-50)，但選定後不得更改。

Round 2: All stands should be placed in the middle (location 5). Firms can choose prices freely (0-50).

回合三：為避免阻礙交通，攤販必須在街頭巷尾(排頭、排尾)。價格仍然沒有限制(0-50)。

Round 3: Stands should be placed at the two ends (location 1/9) not blocking traffic. Prices are unregulated.

回合四：經過公會強力遊說，政府允許攤販先選擇位置、公告後再選擇價格，但不得事先協調。

Round 4: Stands are allowed to choose locations and then prices (seeing locations) **without** coordination.

回合五：經過公會強力遊說，政府允許攤販先選擇位置、再選擇價格，且可以事先協調。

Round 5: The government allows stands to choose locations and prices **under** coordination.

學號：

姓名：

系級：

(Round) (My location) (mark ↓) (My price)

這是第\_\_\_\_\_回合，我選擇的位置是：\_\_\_\_\_ (請標示)，我選擇的價格是：\_\_\_\_\_

|                  |   |   |   |   |   |   |   |                 |
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|------------------|---|---|---|---|---|---|---|-----------------|

(My opponent's location) (mark ↑) (their price)

我的對手選擇的位置是：\_\_\_\_\_ (請標示)，他的價格是：\_\_\_\_\_。

(# of consumers who come to me) (My profit)

來我這裡購買早餐漢堡的消費者有\_\_\_\_\_位，所以我的利潤是：\_\_\_\_\_。