R09245017

PA1

1. [Using ABC]

(b)

```
Last login: Thu Oct 15 10:56:27 on console thouriminochouriminade-MacBook-Pro - % show zsh: command not found: show zsh: zohuzimiaoge/bnuzimiaode-MacBook-Pro - % brow rm -f gs Zhouzimiaoge/bnuzimiaode-MacBook-Pro - % brow rm -f gs Zhouzimiaoge/bnuzimiaode-MacBook-Pro - % brow install gs Updaced/bin/ps2ps | Jamin's provided thomebrew | John the State of th
```

截止時間前尚未排除指令錯誤的問題,故截圖至此。

(a)

.model 4bitadder

inputs A3 A2 A1 A0 B3 B2 B1 B0 CIN

.outputs COUT S3 S2 S1 S0

.subckt fulladder a=A0 b=B0 cin=CIN s=S0 cout=CARRY1
.subckt fulladder a=A3 b=B3 cin=CARRY3 s=S3 cout=COUT
.subckt fulladder b=B1 a=A1 cin=CARRY1 s=XX cout=CARRY2
.subckt fulladder a=JJ b=B2 cin=CARRY2 s=S2 cout=CARRY3

.names XX S1

11

.names A2 JJ

11

.end

.model fulladder

.inputs a b cin

.outputs s cout

.names a b k

10 1

01 1

.names k cin s

10 1

01 1

.names a b cin cout

11-1

1-1 1

-11 1

.end

- 2. [ABC Boolean Function Representations]
 - (a)
 - 1.
 - 2.
 - (b)