```
1
2  const game = {
3    U: { L: [2, 6], C: [0, 4], R: [4, 4] },
4    M: { L: [3, 3], C: [0, 0], R: [1, 5] },
5    D: { L: [1, 1], C: [3, 5], R: [2, 3] },
6  }
7
8  const questionParts = {
9    a: { player: 1, strategy: [ 1/6, 1/3, 1/2 ] },
10   b: { player: 2, strategy: [ 1/6, 1/3, 1/2 ] },
11   c: { player: 1, strategy: [ 1/4, 1/8, 5/2 ] },
12   d: { player: 2, strategy: [ 1/3, 1/3, 1/3 ] },
13   e: { player: 2, strategy: [ 1/2, 1/2, 0/1 ] },
14 }
15
16 function bestResponse({ game, strategy, player }) {
17   let maxPayoff = -99999, brSet = []
18   function updateBR({ payoff, s }) {
19     if (payoff === maxPayoff) brSet.push(s)
20     if (payoff > maxPayoff) { maxPayoff = payoff; brSet = [s] }
21   }
22
23   // eslint-disable-next-line default-case
24   switch (player) {
25     case 1:
26       for (const s of ['U', 'M', 'D']) {
27         const payoff =
28           game[s].L[0] * strategy[0] +
29           game[s].C[0] * strategy[1] +
30           game[s].R[0] * strategy[2]
31         updateBR({ payoff, s })
32
33       }
34       break
35     case 2:
36       for (const s of ['L', 'C', 'R']) {
37         const payoff =
38           game.U[s][1] * strategy[0] +
39           game.M[s][1] * strategy[1] +
40           game.D[s][1] * strategy[2]
41         updateBR({ payoff, s })
42       }
43       break
44   }
45   return brSet
46 }
47
48 for (const letter of Object.keys(questionParts)) {
49   const br = bestResponse({ game, ...questionParts[letter] })
50   console.log(`${letter}) {${br.join(',')}}`)
51 }
52
53 /*
54  * output:
55  * a) {U}
56  * b) {R}
57  * c) {U}
58  * d) {R}
59  * e) {L,R}
60  */
```