

```
#!/usr/bin/env python3
```

```
import sys
```

```
sys.stdin = open('calcio_input_2.txt')
```

```
sys.stdout = open('output.txt', 'w')
```

```
def solve(t):
```

```
    input() # prima riga vuota
```

```
    N, M, K, A, B = map(int, input().strip().split())
```

```
    X, Y = map(list, zip(*[map(int, input().strip().split()) for _ in range(K)]))
```

```
    mappa = []
```

```
    for _ in range(N):
```

```
        riga = []
```

```
        for _ in range(M):
```

```
            riga.append(0)
```

```
        mappa.append(riga)
```

```
    for p in range(0, len(X)):
```

```
        mappa[X[p]][Y[p]] += 1
```

```
    count = float("inf")
```

```
    for k in range(0, N-A+1):
```

```
        for m in range(0, M-B+1):
```

```
            start=[]
```

```
            count2 = 0
```

```
            for i in range(A):
```

```
                riga_start=[]
```

```
                for l in range(B):
```

```
                    riga_start.append(mappa[k+i][l+m])
```

```
                start.append(riga_start)
```

```
            for v in range(0, A):
```

```
                count2 = count2 + sum(start[v])
```

```
            if count2 < count:
```

```
                count = count2
```

```
    print(f"Case #{t}: {count}")
```

```
T = int(input().strip())
```

```
for t in range(1, T+1):
```

```
    solve(t)
```

```
sys.stdout.close()
```