```
test_cases = int(input())

for _ in range(test_cases):
    mass, height = map(int, input().split())

bmi = mass / (height ** 2)
    if bmi <= 18:
        category = 1
    elif bmi >= 19 and bmi <= 24:
        category = 2
    elif bmi >= 25 and bmi <= 29:
        category = 3
    else:
        category = 4</pre>
```