Please show **all** your work! Answers without supporting work will not be given credit. Write answers in spaces provided.

Name:——

1. [**4 pts**] Find the point(s) (x, y) where the function $f(x, y) = 3x^2 + 4xy + 6x - 15$ attains maximal value, subject to the constraint $x + y = 10$.

Answer:————————————————————————————

2. [**6 pts**] Find the minimum of the function using **LaGrange Multipliers** of the function $f(x, y) = 2x^2 + 4y^2$ subject to the constraint $x^2 + y^2 = 1$.

Answer:————————————————————————————