NEWTON'S METHOD IN TWO DIMENSIONS

PUT YOUR NAME(S) HERE

1. INTRODUCTION

Set up the problem and give the background.

2. DISCUSSION

What is the method we are discussing, and what is it used for? Try to give the reader an intuitive understanding of the algorithm, as well as a formal mathematical algorithm.

Are there any problems that users should know about in using the method?

3. MAPLE PROGRAMMING

Here is an example of how to include Maple code into your LaTeX document-The `verbatim` environment is typeset exactly as shown with no further processing. Here is the main "for" loop that we discussed for the one-dimensional Newton's method:

```
for i from 1 to 4 do
    y:=newt(t);
    if abs(y-t)<10^(-8)
    then printf("Done on iterate %d", i);
        printf(" and the solution is %f\n", y);
        break;
    else
        t:=y;
    end
od;
```

4. EXAMPLES

We now demonstrate the method ...