Problem 13. (8 points):

Consider the source code below, where M and N are constants declared with #define.

```
int mat1[M][N];
int mat2[N][M];

int sum_element(int i, int j)
{
  return mat1[i][j] +  mat2[i][j];
}
```

A. Suppose the above code generates the following assembly code:

```
sum_element:
        pushl %ebp
        movl %esp,%ebp
        movl 8(%ebp),%eax
        movl 12(%ebp),%ecx
        sall $2,%ecx
        leal 0(,%eax,8),%edx
        subl %eax,%edx
        leal (%eax,%eax,4),%eax
        movl mat2(%ecx,%eax,4),%eax
        addl mat1(%ecx,%edx,4),%eax
        movl %ebp,%esp
        popl %ebp
        ret
```

What are the values of M and N?

M =

N =