

```

void printMatrix(int matrix[][MAX_SIZE], int rows, int cols)
{
    int i, j;
    count++;
    for(i=0; i<rows; i++)
    {
        count = count + 3;
        for(j=0; j<cols; j++)
        {
            count = count + 2;
        }
    }
}

```

c) Determine the value of count when the function ends:

$$\text{count} = (3 * \text{rows} + \text{rows} * 2 * \text{cols}) + 1$$
~~$$= \text{rows} * (3 + 2 * \text{cols}) + 1$$~~

$$= \text{rows} * (3 + 2 * \text{cols}) + 1$$

d) Write the step count table for the function.

Statement	s/e	Frequency	Total Steps
void printMatrix(int matrix[...])	0	0	0
{	0	0	0
int i, j;	0	rows+1	rows+1
for(i=0; i<rows; i++)	1	0	0
{	0	rows(cols+1)	rows(cols+1)
for(j=0; j<cols; j++)	1	rows*cols	rows*cols
printf("%d", matrix[i][j]);	1	rows	rows
printf("\n");	1	0	0
}	0	0	0
}	0		

3 * rows + 2 * rows * cols + 1

Total:

5) void mult(int a[][MAX_SIZE], int b[][MAX_SIZE], int c[][MAX_SIZE])

```

{
    int i, j, k;
    for(i=0; i<MAX_SIZE; i++)
        for(j=0; j<MAX_SIZE; j++)
        {
            c[i][j] = 0;
            for(k=0; k<MAX_SIZE; k++)
            {
                c[i][j] += a[i][k] * b[k][j];
            }
        }
}

```