Pictures on the Go

*Extracted from:*Intro. to C.S C.D.
Source file name: `pictures.py`
Time limit: 3

A USB flash drive, also variously known as a thumb drive, pen drive, jump drive, disk key, disk on key, flash-drive, memory stick or USB memory, is a data storage device that includes flash memory with an integrated USB interface. It is typically removable, rewritable and much smaller than an optical disc.

The ultimate file size of a given image depends not only on the image format used, but also on the image itself. In addition, formats such as JPEG allow the user to select the degree of compression for the image quality desired. For this program, we assume the image compression ratios given below (Figure 1). All the images have a resolution of a x b pixels.

Format	Full Name	Color Depth		Compression	
GIF	Graphics Interchange Format	256 colors	8 bits	lossless	5:1
JPEG	Joint Photographic Experts Group	16 million colors	24 bits	lossy	25:1
PNG	Portable Network Graphics	16 million colors	24 bits	lossless	8:1
TIFF	Tagged Image File Format	280 trillion colors	48 bits	lossless	n/a

Thus, for example, a 800x600 resolution image with 16-bit (2 bytes) color depth would have a total number of bytes of 800x600x2 = 960,000. For a compression rate of 25:1, the total number of bytes needed to store the image would be 960000/25 = 38400. Finally, assume that a GB (gigabyte) equals 1,000,000,000 bytes.

Develop a Python program that determines how many images can be stored on a given size n USB (flash) drive. The number of images that can be stored must be calculated for GIF, JPEG, PNG, and TIFF image file formats.

Input

The input contains one single line with three values separated using one space between them. The first two values are two integers a and b define the image resolution. The last value defines the size of the USB drive in gigabytes (GB).

The input must be read from standard input.

Output

The program output should be formatted as given below.

```
xxxxx images in GIF format can be stored
xxxxx images in JPEG format can be stored
xxxxx images in PNG format can be stored
xxxxx images in TIFF format can be stored
```

Where `xxxxx` refers to the amount of images available in each format. Additionally, values must be rounded to two decimal places.

The output must be written to standard output.

Sample Input	**Sample Output**
800 600 4	5208.33 images in GIF format can be stored 8680.56 images in JPEG format can be stored 2777.78 images in PNG format can be stored 173.61 images in TIFF format can be stored

Sample Input	**Sample Output**
640 480 2.5	5086.26 images in GIF format can be stored 8477.11 images in JPEG format can be stored 2712.67 images in PNG format can be stored 169.54 images in TIFF format can be stored