

Short Answer:

1. Given the constraints that a picture must be less than 300 by 300 pixels, how can we use JES's command line to check the size of any of our pictures? Aka, what is the code that does this?
2. What does it mean, in general, to use return in a picture function? Why might we want to use it?

Code Tracing:

Given the following special copy function, what do you think the final picture, canvas, will look like after running this code?

```
def copyCrazy(picture):
    w = getWidth(picture)
    h = getHeight(picture)
    canvas = makeEmptyPicture(w,h, white)
    show(canvas)
    for x in range(0,w):
        for y in range(0,h):
            fromPixel = getPixel(picture,x,y)
            toPixel = getPixel(canvas,x,y)
            if(x%4 == 0):
                setColor(toPixel, red)
            else:
                setColor(toPixel,getColor(fromPixel))
    repaint(canvas)
    return(canvas)
```

Writing a Helper Function:

Say we want to edit a picture where, based on certain conditions, we want to edit each pixel to a much bluer RGB value. The following is the code for the picture editing function, but inside its for loop it calls another function, bluer(pixel). It is your job to write the bluer function, given that you must reduce the red and green values to make the pixel bluer.

```
def somewhatBlue(picture):
    for pixel in getPixels(picture):
        b = getBlue(pixel)
        if(b > 100):
            bluer(pixel)
    return picture
```

```
def bluer(_____):  
    #fill in your code here!
```