Problems 5: Register allocation

Consider the following statement:

```
v = (x+1) / ((y*2)+(z*3))
```

1. Represent this as an IR tree, assuming locations 0, 4, 8, 12 for v, x, y, z, respectively.

2. Flatten the tree to a sequence of quadruples.

3. Construct the interference graph (of temporary variables) and show how many registers are needed to store the temporary variables.

4. Suppose that the number of available registers is one less than required. How could the program be rewritten for this number of registers.