Name: \_\_\_\_\_

Directions: Work only on this sheet (on both sides, if needed); do not turn in any supplementary sheets of paper. There is actually plenty of room for your answers, as long as you organize yourself BEFORE starting writing.

1. Give the approximate value of the output of the following code:

```
import random
r = random.Random(98765)
c = 0
for i in range(1000):
    u = r.uniform(0.0,1.0)
    if u > 0.2 and u < 0.8: c += 1
print c</pre>
```

2. Consider the inventory simulation on p.5 of our PLN. For each of the command-line arguments, **r**, **s**, **k**, **m**, state whether an increase of that argument would either (a) increase the value printed out by the program, (b) decrease that value or (c) the change could be positive or negative. (Assume **nreps** is very large.)

Solutions:

**1.** 600

2.

 $\mathbf{r}$ : increase

 $\mathbf{s}$ : increase

 $\mathbf{k}$ : decrease

 $\mathbf{m}:$  decrease