1. Do problems: 8.6: 1, 2

2. In the old days, enterprising programmers used normal text to create wonderful works of art: a personal favorite of mine is the coffee cup $c\]$. One can make a mountain using the two slash symbols / and \. For instance,

```
/\/\/
```

is a mountain range with 3 /’s and 3 \’s that doesn’t dip below the horizon.

```
/\\ \\
/ \
```

is another.

Draw all possible mountain ranges with 3 /’s and 3 \’s that don’t dip below the horizon. How many different ways can you make a mountain range with 20 /’s and 20 \’s that don’t dip below the horizon?

3. Do problems: 8.6: 6, 7, 8

The grader will pay special attention to number 8.6.2 and 8.6.8, so you should write these up more carefully. Don’t just give an answer, but explain.