Homework 2

Due: Jan 31

1. Milnor-Stasheff: 4-B
2. Milnor-Stasheff: 4-C
3. Milnor-Stasheff: 4-E
4. Milnor-Stasheff: 5-B
5. Milnor-Stasheff: 5-C
6. Show that the space of *oriented* 2-planes in $\mathbb{R}^4$ is diffeomorphic to $S^2 \times S^2$ and therefor deduce that $G_2(\mathrm{R}^4)$ is double-covered by $S^2 \times S^2$.