

**book problems**

pg. 6-8 1b, 1d, 7, 10a, 14

pg.10 2, 8

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pg.19 2,3,8,11

**Extra credit problem:**

1. Prove or disprove  $\frac{n^n}{3^n} < n! < \frac{n^n}{2^n}$  for all  $n \geq 6$ .