

**EVEN ANSWERS TO HOMEWORK “TO FINISH BY
MARCH 3”**

Extra problem: His data is flawed since it implies that there were more than 1000 people in his sample space.

Chapter 1.10:

4: $\frac{2}{3}$

6: $\frac{3\binom{60}{10} - 3\binom{30}{10}}{\binom{90}{10}}$

Chapter 2.1:

6: $\frac{2}{3}$

10: $\frac{2}{9} + \frac{18}{11 \times 36} + \frac{8}{3 \times 36} + \frac{50}{13 \times 36}$

Chapter 2.2:

7: There is a typo in the solutions manual, (b) $\frac{8}{.92}$

8: $\frac{1}{36}$

10: $\frac{\binom{5}{3}\left(\frac{3}{4}\right)^2\left(\frac{1}{4}\right)^3 + \binom{5}{4}\left(\frac{3}{4}\right)\left(\frac{1}{4}\right)^4 + \left(\frac{1}{4}\right)^5}{1 - \left(\frac{3}{4}\right)^5}$

12: (a) $\frac{1}{4}$ (b) $\frac{11}{24}$

16: $\frac{3^3 + 3^2 \times \binom{4}{1} \times 2 + 3 \times \binom{5}{2} \times 4 + \binom{6}{3} \times 8}{3^7}$