

Hw3 - Answers

Section 6.1

10 There are ten ways to throw at least 9 with two dice:

(3, 6), (6, 3), (4, 5), (5, 4), (5, 5), (6, 4), (4, 6), (6, 5), (5, 6), (6, 6)

The probability of this event is $10/36 = 5/18$.

11 (i) $1/2$, (ii) $1/8$

12 (i) $1/2$, (ii) $1/8$

22 (a)

$$\frac{996 - 102}{6} + 1 = 149 + 1 = 150$$

(b)

$$\frac{150}{900} = \frac{1}{6}$$

29 $326 - 87 + 1 = 240$

Section 6.2

29 (a) $3 \cdot 2 \cdot 2 = 12$, (b) $3 \cdot 4 = 12$

12 (b) $10 \cdot 16^4 \cdot 13$

30 (a) $6!$, (b) $2 \cdot 5!$ (the doctor has two seats to choose from), (c) $3!$