

4.

a. $P_A = 500$

$$P_H = 500$$

$$P_{\text{no fits}} = (500 - 300) \times 2 + (500 - 300) \times 2 = 800$$

b.

$$P_B = 900$$

$$(900 - 600) \times 3 = 900$$

c.

$$P_A = 199$$

$$P_H = 199$$

$$P_B = 1000$$

$$(1000 - 600) + (199 - 300) + (199 - 300) = 1398$$