

67, 82, 84, 85, 86

67

a.

You can't calculate the joint probability knowing the probability of both events occurring, which is not in the information given; the probabilities should be multiplied, not added; and probability is never greater than 100%

b.

A home run by definition is a successful hit, so he has to have at least as many successful hits as home runs.

82.

a. 0, 00, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17...36

b. 0.47

c. 0.32

d. 0.47

e. No, getting an odd number is not the complement of getting an even number because here sample space starts from 1 to 36 and also contains 0 and f.

f. red and black

g. even and first dozen are not independent

84.

85.

a. {G1, G2, G3, G4, G5, Y1, Y2, Y3}

b. $\frac{5}{8}$

c. $\frac{2}{3}$

d. $\frac{2}{8}$

e. $\frac{6}{8}$

f. No, because $P(G \text{ AND } E)$ does not equal 0.

86.