#7 (#19, p9. 121)

Since sample is small relative to Population we assume independence

$P(\text{"2 or more in sample"})$

$= 1 - P(\text{"1 or 0"})$

$= 1 - P(0) - P(1)$

$= 1 - (.94)^{15} - P\{dggg\cdots, gdgg\cdots, \text{etc.}\}$

$= 1 - (.94)^{15} - 15(.06)(.94)^{14} = \underline{0.226}$

#8 (#28, 122)

a. $P(\text{"at least one of } A_i\text{"}) = 1 - P(\text{"none of } A_i\text{"})$

$= 1 - P(\bar{A}_1\bar{A}_2\cdots\bar{A}_n)$

$= 1 - P(\bar{A}_1)P(\bar{A}_2)\cdots P(\bar{A}_n)$ since A_i ind.

$= 1 - [1-p_1][1-p_2]\cdots[1-p_n]$

b. $P(\text{"none of the } A_i\text{"}) = [1-p_1][1-p_2]\cdots[1-p_n]$