

### 3.4.3

$$(a) P(\text{Male} \cap \text{Split Drugs}) = \frac{349}{1021} = 0.341822$$

$$(b) P(\text{Male} \cup \text{Split Drugs}) = \frac{673 + 569 - 349}{1021} = 0.874633$$

$$(c) P(\text{Male} \mid \text{Split Drugs}) = \frac{349}{569} = 0.613357$$

$$(d) P(\text{Male}) = \frac{673}{1021} = 0.659158$$

### 3.4.4

$$(a) P(I) = \frac{417}{2720} = 0.153309$$

$$(b) P(A \mid Af) = \frac{162}{745} = 0.217450$$

$$(c) P(As \cap I) = \frac{203}{2720} = 0.0746324$$

$$(d) P(Hi \cup H) = \frac{676 + 166 - 128}{2720} = 0.2625$$

$$(e) P(W') = P(W^c) = P(\overline{W}) = \frac{196 + 166 + 417 + 145}{2720} = 0.339706$$