

1. A survey was taken and the the number of people in each of the catorgories is given in the table. A person is selected at random. Compute the following probabilities.

$$\text{a) } P(F|C) = \frac{35}{130}$$

$$\text{b) } P(A^C|G) = \frac{55 + 65}{165} = \frac{120}{165}$$

	A	B	C	total
E	10	20	30	60
F	15	25	35	75
G	45	55	65	165
total	70	100	130	300

2. Use the tree to answer these questions. You do not need to simplify to a decimal answer. These questions will be graded right or wrong so be carefull.

$$\text{(a) } P(Y|G) = \frac{\frac{3}{5} * \frac{2}{13}}{\frac{3}{5}} = \frac{2}{13}$$

$$\text{(b) } P(T) = \frac{2}{5} * \frac{5}{11} + \frac{3}{5} * \frac{4}{13}$$

$$\text{(c) } P(G|B) = \frac{\frac{3}{5} * \frac{7}{13}}{\frac{2}{5} * \frac{2}{11} + \frac{3}{5} * \frac{7}{13}}$$

