# Probability and Statistics (MATH 1530-017) 

Attendance Quiz, February 26, 2009
NAME $\qquad$ E-NUMBER $\qquad$
Pick the letter of the best answer. The problems are worth 2 points each.

The National Survey of Adolescent Health interviewed several thousand teens (grades 7 to 12). One question asked was "What do you think are the chances you will be married in the next ten years?" Here is a two-way table of the responses by gender:

|  | Female | Male |
| :--- | :---: | :---: |
| Almost no chance | 119 | 103 |
| Some chance, but probably not | 150 | 171 |
| A 50-50 chance | 447 | 512 |
| A good chance | 735 | 710 |
| Almost certain | 1174 | 756 |

1. What percent of those who thought they were almost certain to be married were female?
(a) about $40 \%$
(b) about $45 \%$
(c) about $50 \%$
(d) about $61 \%$
2. Your percent from the previous exercise is part of
(a) the marginal distribution of chance of marriage.
(b) the marginal distribution of gender.
(c) the conditional distribution of gender given chance of marriage.
(d) the conditional distribution of chance of marriage given gender.
