

Name _____ Mr. Schlansky Date _____ Algebra II

Creating/Using Two Way Probability Tables

1. In a class of 30 students, there are 16 girls and there are 12 honors students. If there are 10 honor students that are girls, what is the probability that a student is not an honors student given that they are a girl?

2. There are a total of 160 doctors in a city. There are 75 female doctors and 25 pediatricians. There are 20 female pediatricians. What is the probability that a doctor is a female given that they are a pediatrician? What is the probability that a doctor is a pediatrician given that they are female?

3. The guidance department has reported that of the senior class, 2.3% are members of key club, K, 8.6% are enrolled in AP Physics, P, and 1.9% are in both. Determine the probability of P given K, to the *nearest tenth of a percent*.

4. In a local high school, the probably that a student passes the Algebra II Regents is 82% and the probably that a student passes Chemistry Regents is 74%. If the probably that a student passes neither exam is 18%, find the probability that a student passes the Chemistry Regents and not the Algebra II Regents.

5. Out of 29 students in a Geometry class, 19 came to a 6-hour review class in June. If 20 students passed the Regents and 16 students came to the 6-hour review class and passed the Regents, what is the probability that a student who did not attend the review class passed the Regents? Round your answer to the nearest percent.

6. There are 84 athletes on a Track and Field team. 68 are sprinters and 14 are jumpers. If 10 athletes neither sprint nor jump, what is the probability that a sprinter is a jumper? Round your answer to the nearest tenth of a percent.