

Quiz 9

1. Write the first 8 levels of Pascal's triangle.
2. Use the 5th level to expand $(a + b)^6$
3. Find the coefficient of the term x^7 in the expansion of $(x - 2)^{10}$
4. Use the "pigeon hole principle" so show that if there are 8 people in a room, then at least two were born on the same day of the week.
5. What is the least number of people needed so assure that there are at least 3 people born on the same day of the week?
6. Students in a really good math class receive only the grades A, B, or C. What is the least number of students needed to insure that there are at least either 5 A's or 4 B's or 3 C's?