

Name: _____ Period: _____ Date: _____

Permutations and Combinations Bell Work

Solve problems involving permutations and combinations.

1. How many ways can eight displays of different styles be rearranged on a shelf?
2. In how many ways can we rearrange the letters in the word "EXAGGERATE"?
3. How many ways can a president, vice president and secretary be chosen from 5 candidates?
4. In how many ways can Jim, Ben, Anna, Rica and Richard sit in a row, if Ben and Anna are seated next to each other?
5. How many 3 - member committees can be formed from 10 persons?
6. How many ways may 5 girls and 2 boys be arranged in a row of seven seats?
7. How many 5-letter password of distinct characters can be formed using the letters a to z?
8. How many diagonals does a regular nonagon have?

There are 5 males and 4 females. How many 3-member committees can be formed if

9. A committee is composed of all male members?
10. A committee composed of 2 males and a female?