

You don't need to calculate the exact number, expressions like 5^7 or $\frac{7!}{4!}$ is enough to present your answer.

1. There are 30 rows in the theater. Each row has 20 seats. Only 72 people bought tickets to see the new movie. How many different way are there for them to sit?
2. There are three cities, A, B, and C in The Magic Country. There are 6 roads going from A to B and 4 roads going from B to C and there are no roads going directly from A to C. How many different ways are there to go from A to C?
In The Magic Country city D is built. Also, two roads from A to D and from D to C were constructed. How many ways are there now no go from A to C?

3. In NY state license plates (not customized) have 3 letters and 4 digits. How many different, not customized plates can be given to NY residents?



4. Evaluate:

$$\left(1\frac{2}{5} + 3.5 : 1\frac{1}{4}\right) : 2\frac{2}{5} + 3.4 : 2\frac{1}{8} - 0.35 =$$

(Answer is 3) Write your solution.

5. Ratio of number of girls and number of boys is 2:3.
 - a. How many girls and how many boys are there in the class, if there are 35 students altogether?
 - b. How many boys are there if there are 8 girls in the class?
 - c. How many girls are there if there are 15 boys in the class?