

Q1 ~~There~~ There are 5 coins, of the following colors: red, blue, green, black, white. Each coin has a 'head' and a 'tail'. Consider a blue coin's head as distinct from black coin's head (etc.). 23 monkeys take turns tossing all 5 coins. After 3 years of tossing coins 10 hrs a day, how many different '5 coin toss' results would they have (unique) obtained 'finally'?

Q2 Solve the following equations. for value of x and y .

$$\frac{1-y}{x+1} = 1 - \frac{3y}{y}$$

$$3 - (x - 2y) = 8$$

Q3 The volume of a pyramid is 3000π .

If a cone also has the same volume, what is the ratio of the diameter of the base of the cone to the side of the square base of the pyramid? The heights of the cone and the pyramid are the same.

Q4 If there is a group of 5 boys and 5 girls on a prom night, how many distinct dance pairs can be formed? Assume for each song each girl pairs up with exactly one boy?

Q 5. ~~Draw the graph~~

Draw a graph and show the feasible region of the following inequalities. e

$$3x - y \leq 2$$

$$x + y \geq 1$$

