Probability P4: Probability of This OR That

In drawing a card from a standard deck, what are the following probabilities?

- 1. P(king OR a spade)
- 2. P(ace OR a 3)
- 3. P(face card OR a black card)
- 4. P(a club OR a heart)
- 5. P(an odd numbered card OR a red card)

The Venn diagram represents peoples' choices for food at a party, find the following probabilities:



- 6. P(Pizza Only)
- 7. P(Roast Goose Only)
- 8. P(Tacos or Roast Goose but not Pizza)
- 9. P(Pizza or Tacos but not Roast Goose)
- 10. P(Pizza or Tacos or Roast Goose)
- 11. P(Likes all three choices)
- 12. P(Likes more than 1 choice)

You are picking a group of 4 people to work on a school project. In the class, there are 15 girls and 12 boys. What is the probability that your group has:

- 13. 2 girls in it
- 14. 3 boys in it

15. You have a basket with 5 red marbles, 6 green marbles 7 orange marbles and 10 blue marbles. If you select a marble at random what is the probability that it is either red or orange?