

Name: _____ Date: _____

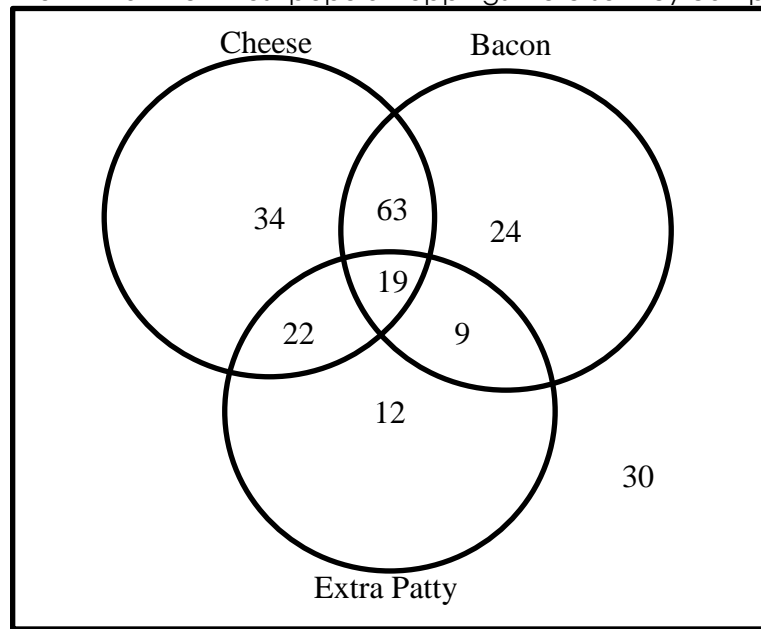
AMDM Venn Diagram Practice

Set up a diagram for each situation, then answer the following questions. Leave all answers as simplified fractions or as percentages

1. Out of fifty students, 14 are taking English Composition and 29 are taking Chemistry. There are five students are in both classes.
2. How many students are in neither class?
3. How many students are taking chemistry?
4. What is the probability that a randomly- chosen student from this group is taking English Composition given that they're not taking Chemistry?
5. What is the probability that a randomly chosen student from this group is not taking chemistry given that they're taking English Composition?
6. Robert asked 60 students whether they listen to two popular radio stations, WROK and WRAP. He Found that 23 listen to WROK, 18 listen to WRAP and 8 listen to both.
7. How many students in Robert's survey listen to WROK but not WRAP?
8. How many students in Robert's survey listen to WRAP but not WROK?
9. How many students in Robert's survey listen to neither WROK not WRAP?
10. What is the probability that a randomly chosen student likes WROK?
11. What is the probability that a randomly chosen student does not like WRAP given they don't like WROK?
12. What is the probability that a randomly chosen student likes WRAP or WROK?
13. Carrie did a study of the colors used in African national flags. She found that 38 have red, 20 have blue, 13 have both red and blue and 8 have neither.

14. How many flags have red but not blue?
15. How many flags have blue but not red?
16. How many flags were included in the study?
17. What is the probability that a randomly chosen African flag has red or blue?
18. What is the probability that a randomly chosen African flag has only red or only blue?
19. What is the probability that a randomly chosen African flag has red GIVEN that it doesn't have blue

Superburger wanted to know what their most popular toppings were so they can prepare what to order for next week.



20. How many burgers did Superburger sell?
21. How many people ordered an extra patty?
22. How many people ordered cheese?
23. How many people ordered bacon?
24. How many people ordered cheese and Bacon?
25. How many people did not add anything on to their burger?
26. What is the probability that a randomly selected person would have ordered bacon?
27. What is the probability that a randomly selected person didn't order cheese?
28. What is the probability that a randomly selected person didn't order cheese but did order bacon?
29. What is the probability that someone ordered cheese given they ordered an extra patty?
30. What is the probability that someone ordered bacon given they ordered cheese?