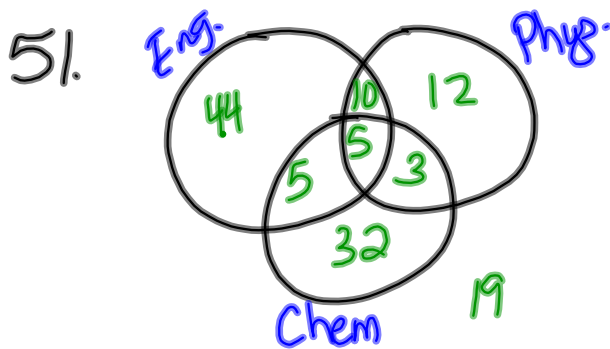


## Pre-Rubric A

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. D  | 11. A | 21. B | 31. D | 41. C |
| 2. C  | 12. A | 22. D | 32. C | 42. C |
| 3. D  | 13. D | 23. B | 33. B | 43. A |
| 4. C  | 14. C | 24. B | 34. B | 44. C |
| 5. D  | 15. D | 25. C | 35. A | 45. B |
| 6. C  | 16. D | 26. C | 36. D | 46. C |
| 7. B  | 17. D | 27. B | 37. B | 47. D |
| 8. B  | 18. C | 28. B | 38. A | 48. B |
| 9. A  | 19. B | 29. C | 39. C | 49. B |
| 10. B | 20. A | 30. D | 40. D | 50. B |



52 a)  $8 P_2 \cdot 8 P_8 = 2\ 257\ 920$

b)  $n = 10$

c) 1440

53 a) 0.001236

b) 13%

54. a)  $\frac{-2(x-5)}{7(x+2)}$   $x \neq 0, -25$

b) 1.2 hrs

55 a) 1 x-int  $\rightarrow$  3 x-int  
 0 turns  $\rightarrow$  2 turns

55b) 3

QII  $\rightarrow$  QIVD:  $x \in \mathbb{R}$ 

Negative

 $y \in (0, 1)$  $R: \{y \mid y \in \mathbb{R}\}$ 

56.a)  $x = \frac{1}{8}$

b) #1  $\Rightarrow 1110.26$

#2  $\Rightarrow 1547.93$

57a)  $x \approx 7.5$

b) i) 3.9

ii) 6.3 times more acidic

59. A: 2205.96

B: 2080.32

58 i) amp = 3

period =  $720^\circ$

$y = -1$

$\{y \mid -4 \leq y \leq 2, y \in \mathbb{R}\}$

ii)  $y = 3 \sin \frac{1}{2}x - 1$