

Multiple choice – 2 points each

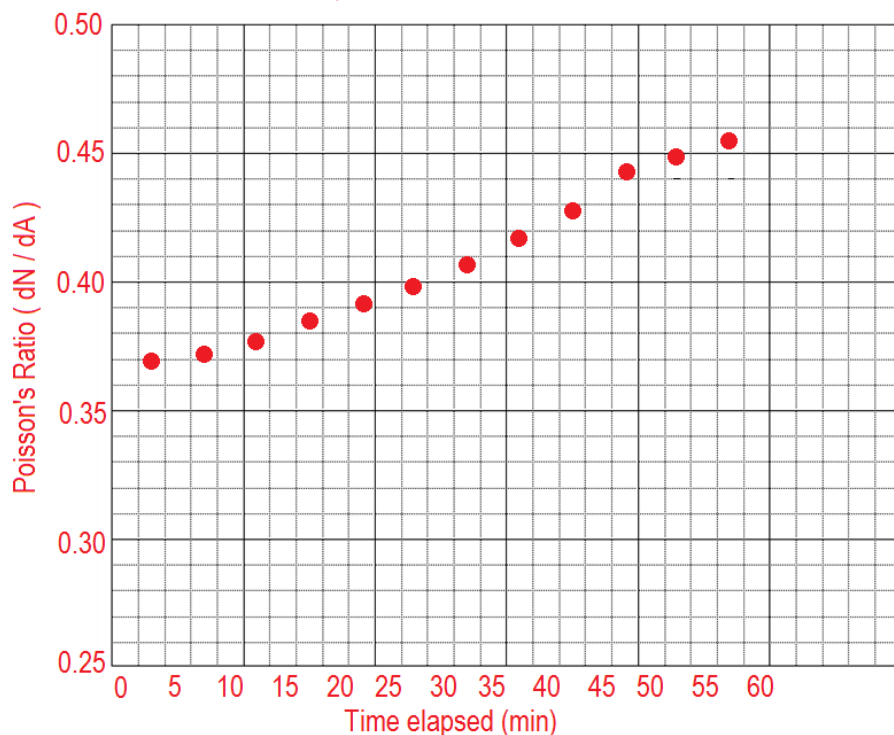
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|------|-------|-------|-------|-------|-------|
| 1. B | 8. B | 15. A | 22. D | 29. A | 36. D |
| 2. C | 9. B | 16. C | 23. A | 30. A | 37. D |
| 3. D | 10. C | 17. C | 24. B | 31. A | 38. D |
| 4. B | 11. B | 18. D | 25. D | 32. B | 39. C |
| 5.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

42-45 – 1 point each for: stem & multiple bond number; perfect suffixes; perfect prefixes & ordering of prefixes

42. 3,4,4-trimethyl-/pentan/al (or condensed, 3,4,4-trimethyl/pentan/al)
43. 7-cyclohexyl-2-methyl-/heptan-/1-ol
44. 7-butyl-5-hydroxy-4-isobutyl-/8-nonyl-/3-one
45. 2-phenyl /ethyl /amine (or condensed, 2-phenyl/ethyl/amine) (treat "ethyl" as stem for scoring)

Forward slash separates prefix, stem, & suffix, for ease of grading – those aren't part of the answers.

Graph of Poisson's Ratio vs. Time



- * Starts at ~0.370 (1)
 - * Increasing to 50 min (1)
 - * Increasing slope (1)
 - * Increase slower from 50-60 min (1)
 - * Ends at ~0.455 (1)
 - * Title (1)
 - * Axes labeled w/ units (2)
- y-axis unit should somehow indicate change in non-axial length over change in axial length
 - * Axes numbered (2)
- Total 10 points

- 46.
47. Anything between 0.4 and 0.41 – ignore significant figures (2 pts all or none, work not needed)
48. Because polymers have viscoelasticity (2 pt), they continue to deform with constant load – strain is dependent on both stress and time (2 pt for either of those).