

Answers to Gas problems in pages 867, 868, 869,

Gases

1. 177 kPa
2. 1330 mm Hg
3. 0.75 atm
4. 76 kPa
5. 0.9813 atm
6. 745.8 torr
7. 99.43 kPa
8. 1.4999 atm
9. 0.600 atm
10. 1.20 atm
11. 1 L
12. 3.2 atm
13. 0.59 L
14. 30 mL
15. 122 mL
16. 14 L
17. 3.8 atm
18. 630 mL
19. 100 mL
20. 280 mL
21. 1.4 mm Hg
22. 140 mL
23. 40 kPa
24. 225 mL
25. 1800 mL
26. 6.05×10^5 mL
27. a. 260 K
b. -11
28. 37°C
29. -74°C
30. 6.9 L
31. 91°C
32. 93 mL
33. 315°C
34. 30 mL
35. -150°C
36. 406 mL
37. 40°C
38. 36°C
39. 1.3 atm
40. 220°C
41. 2.6 atm
42. 37°C
43. 4.6 atm
44. 0.360 atm
45. 267°C
46. 127°C

47. a. 3.72
b. 1.4
48. 760.0 torr
49. 0.0256 L
50. 32.0 g/mol
51. 2.01 atm
52. 3.98 atm
53. 33.7 atm
54. 14.3 atm
55. 105 L
56. 33.0 L
57. 240 mL
58. 247 mL
59. 81.9 g
60. 111 g
61. 0.90 atm
62. 74 g
63. 60.3 g
64. 83.8 g/mol
65. 0.572 g/L
66. 33 g/mol
67. 1.19 g/L
68. 72.7 g/mol
69. 29.0 g/mol
70. 544 L
71. a. 14.2 atm
b. 4.46 atm
c. 77.7 atm
72. a. 39.4 L
b. 14.9 L
c. 3.81 L
73. a. 0.0645 mol
b. 0.0300 mol
c. 0.0377 mol
74. a. 15 g
b. 2.22 g
c. 0.364 g
75. a. 11.7 g/mol
b. 13.5 g/mol
c. 11.5 g/mol

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