## Answers to Practice Problems in pages 446 and 447

30. $P_{\text {total }}=P_{A}+P_{B}+P_{C}$
31. 101325 newtons
32. 13.3 kPa
33. 290 kPa
34. 92.5 kPa
35. 113 mL
36. 175 kPa
37. 1100 mL
38. $4.00 \times 10^{8} \mathrm{~L}$
39. 66.3 mL
40. $7.4 \times 10^{7} \mathrm{~L}$
41.93 .3 mL
41. 2.18 L
42. 0.570 L
43. $37^{\circ} \mathrm{C}$
44. 3.1 L
45. $63^{\circ} \mathrm{C}$
46. 152 kPa
47. 0.360 atm
48. 26 kPa
49. 43 psi
50. 8.4 atm
51. $75^{\circ} \mathrm{C}$
52. 0.781 mol
53. 0.0486 mol
54. 266 kPa
55. 2.5 mol
56. $4.0 \times 10^{3} \mathrm{~L}$
57. 62.4 L
58. $M=64 \mathrm{~g} / \mathrm{mol}$. It is $\mathrm{SO}_{2}$.
59. $M=128 \mathrm{~g} / \mathrm{mol}$. It is HI .
60. $1.91 \times 10^{3} \mathrm{~m} / \mathrm{s}$
61. $240 \mathrm{~m} / \mathrm{s}$
62. 10.4 L
63. 0.484 g Mg
64. $3.56 \times 10^{-2} \mathrm{~g} \mathrm{C}_{8} \mathrm{H}_{18}$
65. a. CO
b. 37.5 mL CO
c. 412.5 mL CH 3 OH
