Answers to even-numbered problems:

Chapter 10

2. 66 kg
4. 0.075 m^3
6. 0.89
8. 124 mm-Hg
10. 1.154 m
12. 1.08 x 10^4 kg
14. 1.21 x 10^5 Pa, 23 MN,1.21 x 10^5 Pa
16. 654 kg/m^3
18. 3.7 x 10^5 Pa
20. 0.339 kg, 1.6 x 10^4 N
22. 2.99 x 10^3 kg/m^3
24. 1.54 x 10^5 N, 1.76 x 10^5 N
26. 12 kg
28. 2.0010 kg
30. 653 N, 666 N she will sink
32. 0.88
34. 5.76 kg
36. 3.1 m/s
38. 9.5 m/s
40. 1.5 x 10^5 Pa
42. 4.6 x 10^{-3} m^3/s
44. 2.3 x 10^6 N
46. 2.2 m/s, 2.0 atm
48.
50. 0.072 Pa-s
52. 4000 Pa
54. 0.11 m
56. 29% reduction
58. 1.8 m
60. 9.1 mN
62.
64. 0.57 mN
66. 2.7 x 10^7 Pa, approximately 270 atmospheres
68. 6.7 x 10^{-4} m^2, 1100 J, 3.4 mm, 35 strokes, 1100 J
70. 0.60 N
72. 5.3 km
74. 5.29 x 10^{18} kg
76. 2.31 x 10^7 kg
78. Supports 88 people, 89 will make it sink
80. 37 N, rock will sink
82.
84. 3.1 m/s, 20 s
86. 185.3 m/s
88. 52% of original