

13. 2 c.dcm.
 14. 6 cu. ft.
 15. 20 cm.
 16. 16 oz. ; 12 cu. in.
 17. (1) 100.078 gm., (2) 60 c.
 cm.
 18. 159.14 gm.
 19. 311.9 gm.
 20. 28.5 gm.
 22. 1.5 gm. placed with the
 weights.
 24. (1) $1\frac{1}{2}$ c.cm., (2) 1 c.cm.

EXERCISE XXXVI. Page 204.

1. 0.413 oz.
 2. $\frac{n-m}{n}$ gm.
 3. 0.881.
 4. 5 c.dcm.
 5. $4\frac{1}{2}$ cu. ft.
 6. $\frac{1}{2}$.
 7. 5.64.
 8. $\frac{1}{2}$.
 9. 225 pds.
 10. n^2 c.cm.
 11. $32\frac{1}{2}$ pds.
 12. 520 gm.
 13. 42 gm.
 14. 9 pds.
 15. 490 pds.
 16. 41.56 in.
 17. 216 sq. in.
 18. 20 lbs.
 19. 125,000.
 20. Forces are equal.
 21. $40\frac{1}{2}$ lbs.
 22. $13\frac{1}{2}$ lbs.
 23. (1) 30 gm., (2) 20 gm.
 24. 1000.
 25. 3 cm. edge.
 26. 1 : 6.
 27. 10.65 gm. per c.cm.
 28. 0.536 gm. per c.cm.
 29. 4.75 in.
 30. 23.48 cm.
 31. 10,000 cu. ft.
 32. 0.514.
 33. 15 oz.
 34. 0.64 in.
 35. 30 lbs.
 37. 1.458 pds.
 38. (1) 2.604 pds., (2) 2.007
 pds.
 39. 7.102 pds. ; 50 pds.

EXERCISE XXXVII. Page 216.

1. 14.756 pds.
 2. 1033.6 gm.
 3. (1) 15 pds., (2) $14\frac{1}{2}$ pds., (3)
 438.48 gm.
 4. (1) 952 gm., (2) 1034 gm.,
 (3) 1030 gm.
 5. $7083\frac{1}{2}$ pds.
 6. 24 ft. ; $9\frac{1}{2}$ ft. ; $7\frac{1}{2}$ ft.
 7. 76 cm. ; 152 cm. ; 304 cm.
 8. 272 in. ; 240 in. ; $81\frac{1}{2}$ in.
 9. 1033.6 cm.
 10. 1.43.
 11. 1307.9 oz. per cu. ft.
 12. 118.23 in.
 13. $56\frac{1}{2}$ ft.
 14. 12.5 : 1.
 15. (a) 1, 22,000 pds. ; 8, (1)
 1,100,000 pds., (2) 487,
 500 pds., (3) 612,500
 pds. ; 13, $2,312\frac{1}{2}$ pds. on
 vertical face, $2,281\frac{1}{2}$ pds.
 on upper face, $2,343\frac{1}{2}$
 pds. on lower face ; 18,
 66 ft.
 (b) 2, 92,016 kgm., 28, (1)
 18,997.44 kgm. ; (2)
 99,756.8 kgm.
 16. $2833\frac{1}{2}$.
 17. 19.87 ft.