

- XLIII. 1. $\frac{1}{4}$ min. 2. \$47. 3. $11\frac{1}{2}$ da. 4. \$400. 5. 20.95%.
- XLIV. 1. 25 mi. an hr., 20 mi. an hr. 2. \$17.10. 3. \$10,000.
4. $\frac{1}{15}$. 5. 9.014 c. cm.
- XLV. 1. $6\frac{1}{4}$ da.; A, \$12.16; B, \$21.24; C, \$38.60. 2. \$980.62.
3. 6 in, 4. \$3. 5. 120 hr.; 240 hr.; they will not.
- XLVI. 1. 1986.2 lb. 2. 13%. 3. In (a) \$2455, in (b) \$2534.
4. 14.7724 gal. 5. 14.3065 sec.
- XLVII. 1. \$5.60. 2. \$145.16. \$125.00. 3. \$36.00.
4. \$31,250.00, \$32,812.50, \$43,750.00, \$43,125.00. 5. 8.51 cm.,
11.25 cm., 196 cm.
- XLVIII. 1. 15 hr. 12 min.; by C. 2. 1.914%. 3. \$51,834.92.
4. 2.308%, 62%. 5. $27\frac{1}{4}$ yd., $54\frac{1}{4}$ yd.
- XLIX. 1. 30.5516 sec. 2. 6%. 3. \$5086.25. 4. 56% (or 23.1%
if the 10% refers to what remained). 5. 0.377 cm.
- L. 1. 43.08 cm. 2. \$510.64. 3. $6\frac{1}{2}$ min. 4. 650.
5. 0.0655 in.; 2.84 in.

EXERCISES. Pages 173-175.

1. 1.4142136, 1.7724539, 2.6457513, 3.6352441, 1.7320508,
1.6487213. 2. 1.259921, 2.108428, 1.912931, 2.223980, 2.351335,
2.884499. 4. 287.1042, 3.1926, 1.3917, 0.1080, 4.4429.
5. 0.22508, 1161.60677, 1.29099, 0.31831, 12.88726, 0.05122.
7. 0.0588235294117647. 8. 21. 19. 180.0000000.
20. 0.404. 22. 0.000107. 23. 0.405144. 24. Less than
0.0000158, or less than 2 hundred-thousandths. 25. It can not.

EXERCISES. Pages 183-186.

1. (1) 210, $n(n+1)+2$; (2) 400, n^2 ; (3) 410, $n(61-n)+2$;
(4) 1870, $n(9n+7)+2$; (5) 2880, $n(7n+4)$; (6) 1030,
 $n(203-5n)+2$. 2. (1) $(3^{20}-1)+2$, $(3^n-1)+2$;