

13. \$2.50. (No. strips = $\frac{54 \times 12}{18} = 36$; length of 1st strip = 8 ft., and of each of the other 35 strips cut $8\frac{1}{3}$ ft.; No. yd. = $99\frac{5}{6}$).
14. \$108.06. (No. strips = $\frac{14\frac{1}{2}}{1\frac{1}{2}} = 10$; 1st strip is cut 18 ft. long, and each of the other 9 is cut 18 ft. 7 in. Total length = $185\frac{1}{4}$ ft. = $61\frac{3}{4}$ yd.).
15. (a) 5 strips. (Carpet to run lengthwise); (b) 9 in.; (c) \$30.29, i.e., $20\frac{5}{8}$ yd. @ \$1.45).
16. \$6 loss. (Cost of 1st = \$168; of 2nd = \$216).
17. \$14 gain; 35% gain. S.p. = \$280; gain = \$60. Cost = \$123; gain = \$41. Cost = \$42; gain % = $33\frac{1}{3}$.
18. \$812.18 = \$800 $\times \frac{100}{98\frac{1}{2}}$. 19. $50\frac{1}{11}$ ac. (R. = $320 \times \frac{7}{44}$ rd.).
20. $4\frac{1}{2}\%$. 21. \$44000. 22. \$18000. (A's capital is $\frac{1}{5}$ of B's).
23. \$384.75. 24. $6\frac{1}{9}$ ft. = 6 ft. $3\frac{1}{9}$ in.

Exercise 182. Page 195

1. (a) 31c.; (b) 55c.; (c) 69c. 2. \$2.25. 3. \$26.60.
4. 24 da. 5. 45 mi. an hr. 6. 26 ft. 8 in. (1 cu. ft. = $6\frac{1}{4}$ gal. = $\frac{25}{32}$ bu., or 1 bu. = $\frac{32}{25}$ cu. ft.). 7. 1080 lb.
8. \$126.50. 9. \$580. 10. \$14.50, $20\frac{5}{8}\%$; \$15.90, 90c.; \$14, $32\frac{1}{7}\%$; \$17.28 $\frac{104}{107}$, \$1.21 $\frac{3}{107}$; \$310, \$322.40.
11. 12 ton. 12. (a) 75c.; (b) 75c.; (c) \$1.20.
13. $20\frac{10}{27}\%$. (Long ton = 2240 lb.).
14. (a) 77760 lb.; (b) \$2656.80; (c) 26.568%. 15. 250 men.
16. (a) $1\frac{7}{10}$ lb.; (b) 4050 lb.; (c) \$5872.50.
17. $6\frac{1}{4}$ mi. {To go and return 1 mi. requires ($\frac{1}{25} + \frac{2}{15}$) hr.}.
18. Canada, 1198.4 bu.; Great Britain, 1780.8 bu.; France, 1456 bu.; Germany, 1086.4 bu.; United States, 750 bu.; Argentina, 1041.6 bu.
19. (a) 400 ac. (b) 32 da. (c) \$1470. (d) \$4380.
20. $3\frac{1}{5}$ t. 21. (a) $10\frac{1}{2}$ t. (b) \$76.12 $\frac{1}{2}$.
22. 10 yr. (15 drains each 80 rd., cost \$396).
23. \$23.25. 24. 12130560 ac. 25. \$66.
26. \$3.60. (Butter fat increased 20 lb. daily).