

IN THE HIGH SCHOOL ARITHMETIC

after the second $\frac{2}{3}$ of $\frac{2}{3}$, &c. After the last drawing there will remain $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of $\frac{2}{3}$ of 150 gal.

48. See Arith., pp. 36, 37.

$$49. \frac{1}{8} = .125, \frac{1}{8^2} = \frac{.125}{8} = .015625, \text{ \&c.}$$

50. On \$400 of liabilities he can pay \$300 - \$50 = \$250, &c.

Page 67

51. The cost of the carriage = $\frac{3}{5}$ of cost of the horse.
 $\therefore \frac{3}{5}$ of the cost of the horse = \$280, &c.

52. One = $\frac{2}{5}$ of the other. $\therefore \frac{3}{5}$ of the larger = 18, &c.

53. If the charge for a cow for a unit of time is \$2, then the charge for a horse is \$3. Each horse for 3 units of time would cost \$9; each cow for 4 units of time would cost \$8. $\therefore$ 2 cows and 3 horses would cost \$43, and 3 cows and 2 horses would cost \$42. $\therefore$ A should pay $\frac{43}{85}$ of \$42.50 = \$21.50.

54. The vote of the elected candidate = $\frac{1}{4}$ of $\frac{1}{5}$ = $\frac{1}{20}$ of the vote polled. $\therefore$ the other received $\frac{19}{20}$ of the vote polled. $\therefore \frac{1}{20}$ of the vote polled = 50, &c.

55. The total volume of 1 lb. of each = ($\frac{1}{500} + \frac{1}{800} + \frac{1}{1000}$), or $\frac{23}{8000}$ of a cub. ft. $\therefore \frac{23}{8000}$ of a cub. ft. of the mixture weighs 3 lb., &c.

56. Sum of the first 5 numbers = $34.5 \times 2 + 19.3 \times 3 = 126.9$; $\therefore$ the sum of the other two = $26.98 \times 7 - 126.9 = 61.96$, &c.

57. On every \$16 the customer paid he was cheated \$1. $\therefore$ on \$9.60 paid he was cheated 45c.