

SOLUTIONS OF THE PROBLEMS

32. The value of the house = $\frac{4}{5}$ the val. of the lot.
 $\therefore$ the val. of both = $\frac{7}{5}$ of val. of lot = \$2100. $\therefore$ val. of lot = $\frac{5}{7}$ of \$2100 = \$900.

33. An increase of $\frac{2}{15}$ in $\frac{3}{4}$ of the price = an inc. of $\frac{2}{15}$ of $\frac{3}{4}$, or $\frac{1}{10}$ in the whole price.

34. Divide the sum into 91 equal parts and give them respectively 17, 20, 24 and 30 of these parts.

35. In 1 day A would rec. $\frac{4}{25}$ and B $\frac{3}{25}$ of the sum.
 $\therefore$ both would rec. $\frac{1}{5}$ of the sum, or the whole sum in 35 days.

36. Total selling price = \$6133.75; first sale brings \$2027.30. $\therefore$ remaining 3135 bus. must sell for \$4106.45.

37. In one day they can do $\frac{1}{10} + \frac{1}{15} + \frac{1}{20}$, or $\frac{1}{6}$ of the work, $\therefore$ they can do the whole work in $\frac{6}{1}$, or 4 $\frac{2}{3}$ days.

38. Suppose A gets \$4 and B \$5 for each unit of time they work, then when A earns \$12, B earns \$20. $\therefore$ A will receive $\frac{1}{2}$ of \$60 = \$22.50.

39. 6 yr. = $\frac{1}{3}$ of father's age - $\frac{1}{5}$ of father's age = $\frac{2}{15}$, &c.

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40. $\$9000 \times \frac{2}{3} \times \frac{5}{4} = \12937.50 .

41. The selling price of 306 gal. = \$1089.70.

42. If the cost of the first is the unit, the second cost $1\frac{1}{2}$, the third $2\frac{1}{2}$, the fourth $3\frac{1}{2}$ = a total cost of 8, making the unit \$3000.

43. $\$4064.55 \times \frac{2}{7} \times \frac{9}{5} \times \frac{2}{3} = \4076.163 .

44. When C receives \$400, B gets \$420 and C \$441.
 $\therefore$ A receives $\frac{441}{1261}$ of \$3783 = \$1323.

45. $\frac{2}{11}$ of 2607 lb. = 474 lb.

46. The time till midnight = $\frac{5}{8}$ of the time past noon.
 $\therefore$ $\frac{5}{8}$ of the time past noon is 12 hours. $\therefore$ the time past noon is $4\frac{1}{2}$ hours.

47. After the first drawing $\frac{2}{3}$ of the wine remains;