```
=24\frac{1}{2} \times 21 \times 3650 \times 26 cents.
=\frac{24}{2} 484,939 Ans.
                     5. 126 \times 4 = 504 miles detective to gain
                                     18. 2 (width \times length) = 2 \times \frac{9}{5} length = \frac{1}{5} length = 112 feet.
                  ∴ length=35 ft.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Since the state of the state o
                     7. G. C. M. of $3.60 and $6.80=20c. cost of each luncheon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Then $122.50 - $105 = $17.50 difference in cost. Ans.
                                 $8.60 \div 20=43 luncheons for boys
$6.80 \div 20=34 "girls

    19. He sells $\gamma_{\text{T}}^2$ of his interest : $\gamma_{\text{T}}^4$ of it left. Then $\gamma_{\text{T}}^7$ of $\vec{q} = \frac{1}{4}\vec{6}$ = 306122 + Ans.
    20. $425 = \frac{1}{4}\vec{2}\vec{6}$ = $\frac{1}{4}\vec{7}$ examined in Arithmetic.

                                 and since James and Lucy were of the party
                                   42 boys and 33 girls were invited Ans.
             8. 100 bus = 5 \times 5 \times 5 cub. ft.

1 "=\frac{5 \times 5 \times 5}{100} " " " " " " " :. height of bin=\frac{1 \times 1}{100} = \frac{1}{100} (12\frac{1}{2} \times 12\frac{1}{2}) = \frac{1}{100} (50\frac{1}{2} \times -\frac{1}{100} coverage of four
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          * *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      " History.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1469 = \frac{1}{6}\frac{1}{6}\frac{1}{6} = \frac{1}{6}\frac{1}{6}\frac{1}{6} = \frac{2}{6}\frac{1}{6} "Grammar.

Then \frac{1}{15} + \frac{1}{7} + \frac{1}{6}\frac{1}{6} = \frac{2}{3}\frac{3}{4} examined in Arith., Hist. and Gram, \therefore \frac{2}{6}\frac{1}{4} - \frac{2}{3}\frac{3}{4} = \frac{1}{2}\frac{1}{6} of the number = 41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ∴ number=264 Ans.
                    9. 5 \times 44 \times 50 = 11,000 possible days of attendance 2500 \div 2 = 1,250 days of absence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21. 20%gain= f of cost; 30% gain= f of cost; and 33 f gain=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           $\frac{1}{2}\text{of cost.}$$ $\frac{1}{2}\text{of cost.}$$ Boots and Shoes = $\frac{1}{2}\text{of sales} = \frac{1}{2}\times \frac{1}{2}\text{of cost.}$$ $\therefore\text{Dry Goods} = \frac{1}{2}\text{of sales} = \frac{1}{3}\times \frac{1}{2}\text{of cost.}$$ $\therefore\text{Dry Goods} = \frac{1}{2}\text{of sales} = \frac{1}{3}\times \frac{1}{2}\text{of cost} = \frac{1}{2}\text{of cost} =
                                               11,000 - 1,250 = 9,750 days really attended
                                                       5+44=220 days each child could have attended
                                     ∴ 9750 + 220 = 44\frac{7}{2} average daily attendance Ans.
                    10. Suppose widow received 6 shares, then a daughter received
                                                3 shares, and a son 4 shares.
                                                Hence whole number shares=6+3\times4+4\times3=30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hence 29,100 - 22,500 = $6,600 gain for the year Ans.
                            Then 3 shares=$1,800 ... 30 shares, or part property=$18,000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22. 1 barrel=56 gal. 448 pints, 5 cents +448=$22.40 sold for
                                                  Since 25 was deducted for expenses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22.40 - 12.20=$10.20 gain.
                 \frac{24}{55} of property = $18,000 property = $18,750 Ans.
11. Father and son do work in 9 \times 8 = 72 hours,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Then on $12.20 the gain = $10.20 fthe rain = $10.20 the gain = $10.20 fthe gain = $10.20 fthe rain = $10.20
                                              and \therefore 5 times the work in 72 \times 5 = 360 hours.
                    1 hour by the father=2 hours by the son.

:360 " " =720 " " "

    gain = 833; per cont. Ans.
    January 17th, 1884, to January 17th, 1885=366 days, January 17th, 1885, to March 14th, 1885=56 days,

                     ∴son does 5 times the work in 360 + 720 = 1,080 hours.
                                              which=1,080÷90=12 hours per day Ans.
                12. \$2.50 = \$ + \frac{1}{5} = \$ of cost price \$1.00 = \frac{1}{5} \times \frac{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : 366+56=422 days money in Bank.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. 300+30=422 days money in Bank.

Interest on $100 for 1 year or 366 days=$4

" 100 " 1 day=\frac{4}{36}"

" 1" 4\(\text{12}\) days=\frac{4}{365}\(\text{20}\) \(\text{204.40}\)

\(\text{204.40}\) for 422 days=\frac{4\(\text{22}\) \(\text{204.40}\)}{365\(\text{100}\)}
                gains of cost Ans.

13. When James gets 8 marbles
                                                                                                                                        " \frac{3}{2} \times 3 = 12 marbles
" \frac{12}{2} \times 5 = 30 "
" \frac{30}{2} \times 7 = 105 "
                                                                                         John
                                                                                          Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          365×100
                                                                                          Alex.
Then of 8+12+30+105=155 marbles James gets 8
.: of 1 " Joines " 15
.: of 620 " James " 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                    =9.4\bar{5}_{16}^{7}. Wherefore she should receive 204.40 = 9.4\bar{5}_{25}^{7} =$213.8\bar{5}_{25}^{7} Ans.
                                                                                                                                                                                                                                                       James " 15 7 James " 32 John " 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                               24. 5 cows for 6 weeks=30 cows for 1 week.

4 " 7 " =28 " 1 "

3 " 8 " =24 " 1 "

2 " 9 " =18 " 1 "
                                                                                                                                                                          620
                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    " 7 " =28
" 8 " =24
" 9 " =18
                                                                                                                                                                                                                                                                                                     " 120
" 420
                                                                                                                                                                                                               **
                                                                                                                                                                                                                                                         Tom
                                                                                                                                                                                                                                                                                                                                                                              Ans.
                                                                                                                                                                           620
                                                                                                                                                                                                           "
                                                                                                                                                                             620
                                                                                                                                                                                                                                                          Alex.
   14 In 5 hours A does work. Again in 6 hours B does work.

"I hour A does b work.

"I hour B does b work.

"I hours B "The street of the street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                All=30 \times 28 \times 24 \times 18=100 cows for 1 week.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               All=30 × 28 × 24 × 18=100 cows for 1 week.

∴ First man should pay 130 of $45=$13.50.
Second "150 "45= 12.60.
Third "150 "45= 10.80.
Fourth "150 "45= 8.10.

25. A thousand of lumber=1,000 sq. ft. 1 inch thick.
             C does the work in 8 hours.

C does the work in 8 hours.

Board of 4 women=board of 3 men.

T woman = " 3 "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \frac{1}{4} mile on each side=\frac{1}{2} mile on both=2,640 ft. \frac{1}{2}640 \times 4 \times 3 = 31680 sq. ft. of surface 1 inch thick.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Now 1,000 ft. =$8
                                           Board of 5 children = board of 3 men.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \therefore 31,680 ft. =$253.44. Ans.
                                                                          " 1 child = " 3 " " 4 children = " 2 " "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26. Distance round the earth=300 degrees.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              distance from equator to north pole=90 degrees.
     .. Board of 1 man, his wife and 5 children=board of 1+3+23=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   width of North Frigid Zone=23½ degrees.
width of north half of Torrid Zone=23½ degrees.
∴ width of North Temperate Zone=90 - (23½+28½)=43 degrees.
                                          43 men.
Then since board of 3 men for 1 week + $7.20

\therefore "1 man "1" = \frac{1}{3}20

\therefore "4\frac{3}{20} men "1" = \frac{20}{320}25

\therefore "4\frac{3}{20}" "13" = \frac{320}{320}20 = \frac{320}{320}20 = \frac{320}{320}20 = \frac{320}{320}320 = \frac{3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 which is 300 of the distance round the earth. Ans. 27. 33+33+18+18=102 feet round room.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 \times 11 = 1122 sq. ft. in walls.
                                                                                                                                                                                                                                                  =$129.48 Ans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33 \times 18 = 594 sq. ft. in ceiling. 7 - 1\frac{1}{2} = 5\frac{1}{2} ft. height of doors above wainscoting.
             16. A owns \frac{7}{17}. \therefore B owns \frac{19}{19}. \therefore Difference \frac{37}{19}. \frac{1}{19} of plot \frac{42}{19} bush. 2 pks. \frac{42}{19} bush. \frac{39}{19} " \frac{42}{19} \times 10 = 425 bush. to B. Ans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102 \times 1\frac{1}{2} = 153 sq. ft. allowed for wainscoting and lower part of
            17. 9 times \frac{87}{83+53} of \frac{47}{73} + \frac{1}{12} = 9 \times \frac{3}{13} \times \frac{3}{12} \times \frac{4}{12} \times \frac{9}{12} = 9 acres.

12 of \frac{1}{2} of \frac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5\frac{1}{2} \times 3\frac{1}{2} \times 2 = 38\frac{1}{2} sq. ft. allowed for doors above wainscoting. 6 \times 3\frac{1}{2} \times 6 = 126 sq. ft. allowed for windows.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : (1122 + 594) - (153 + 38\frac{1}{2} + 126) = 1398\frac{1}{2} sq. ft. = \frac{1398\frac{1}{2}}{9} sq. yards
                                                                      remainder.
                                                                                  Now ¼ ac. =3650 guineas.
∴ ¾ ac. =3650 × 26 guineas.
=26 × 3650 × 26 shillings.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of plastering.

\therefore \cot = \frac{18c. \times 1398\frac{1}{2}}{9} = \$27.97. \text{ Ans}
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