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- (22) A person travels 300 miles in 10 days, his first day's journey was one mile, what was his last? Ans. 1=59 miles.
- (23) A boy won 33700 marbles, his winnings were in arithmetical progression—on the first day he won 3 and on the last 671; how many days did he play? Ans. n=100 days.
- (24) and (28) A body falling through space, falls through 16 feet the first second, through 48 feet the next second, 80 feet the next and so on, what will be its entire descent during 21 seconds and through how many feet will it fall the last second? Ans. 1=656 feet, and S=7056 feet.
- (25) A person purchasing an estate agrees to pay for it in 29 payments, each payment being £25 more than the preceding one; what must the first payment be that the last may =£897? Ans. n=£197.
- (26) Given the number of terms=7; last term=27; first term.
 =3; to find common difference. Ans. d=4.
- (27) A drover bought a flock of sheep, paying Ss. for the first, Ss. 6d. for the second, 9s. for the third, and £2 4s. for the last, how many sheep were there in the flock? Ans. n=73 sheep.
- (28) Find the sums of the following series:
 - 1+5+9+13+&c. to 18 terms. Ans. S=630. $2+2\frac{1}{3}+2\frac{2}{3}+3+\&c.$ to 16 terms. Ans. S=56. $\frac{5}{7}+1+1\frac{2}{7}+\&c.$ to 15 terms. Ans. S=40 $\frac{7}{7}$. and of 9-7-5-3-&c. to 20 terms. Ans. S=200.
- (29) A person worked 47 weeks upon condition that his wages should be increased 2s. every week, at the end of the time he received $\pounds 110$ 9s. as the amount of his wages, what was the wages of the first week? Ans. a=1 shilling.
- (30) Find the common difference of the series of which the first term=2, sum=8675, and number of terms=50. Ans. d=7.
- (31) Given the sum of the series=34850, first term=2, and common difference=7; to find the number of terms. Ans. n=100.