

- (2) $\frac{1}{2} - 1 + (2 \times 3^{10})$, $3(1 - 1 + 3^n) + 2$; (3) $7 \times 2^{30} - 7$, $7 \times 2^n - 7$;
 (4) $5(3^{30} - 1) + 2$, $5(3^n - 1) + 2$; (5) $5(1 - 3^{30} + 5^{30})$,
 $5(1 - 3^n + 5^n)$; (6) $26(1 - 1 + 1 \cdot 04^{30})$, $26(1 - 1 + 1 \cdot 04^n)$.
 3. 10, 10, $11\frac{1}{2}$, $-3\frac{1}{2}$, 0, 1. 4. 6, 12, $3\sqrt{10}$. 5. (1) $\frac{1}{2}$; (2) $\frac{1}{2}$;
 (3) 21; (4) $23\frac{1}{2}$; (5) $\frac{1}{2}$. 6. (1) $\frac{1}{2} + 3^0$; (2) $\frac{1}{2} + 4^0$;
 (3) $21 + 1 \cdot 05^{10}$; (4) $23\frac{1}{2} + 1 \cdot 045^{10}$; (5) $\frac{1}{2} \times 4^{10} + 5^0$. 8. 2856-
 9. 575 $\frac{1}{2}$. 10. (1) 7, 13, 19, 25, 31, 37, 42; (2) $\sqrt{7}$, 7, $7\sqrt{7}$.
 11. 63,660. 12. 2. 13. 3. 14. 2. 15. 2. 16. $\frac{1}{2}$.
 17. 2187-5. 18. 3960. 19. -100, 25, 5600. 20. 1, -2, -5...
 23. $\frac{1}{2}$, 1, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$. 25. $\frac{1}{2}$. 27. $50(10^{30} - 1) +$
 $81 - 250 + 9$. 28. Any G. P. with common ratio $\frac{1}{2}$.
 29. $(10^{30} - 1) + 27$.

EXERCISES. Pages 194-196.

1. 12-41, 5023-54, 516-732, 0-012975, 0-00000026501. 2. 189623,
 16-7542, 1-17855, 41-9502, 0-820221, 8-1441. 3. 13-866, 17-5325.
 4. 1-170, 2-095, 1-414, 2-646, 3-606, 0-4123. 5. 1-089, 4-189,
 1-260, 1-442, 1-710, 0-5066. 6. 1-269, 1-496, 1-246, 1-380, 1-476
 0-8236. 7. 8-062, 1-448. 9. 10. 6, 10 (in integral part).
 10. 4th, 7th, 8th. 11. 4, 10, 3. 12. 17. 13. 5, -1, 0,
 1-361728, 1-85664, 1-02925. 14. (1) 127-445 sq. yd.;
 (2) 249-23 sq. in.; (3) 13877-3 sq. dm.; (4) 3875-73 sq. in.
 15. 672-91, 353-358. 16. (1) \$639-62; (2) \$697-03; (3) \$372-09.
 17. \$829-97. 18. $4\frac{1}{2}\%$. 19. 5% . 20. \$1833-65. 21. \$172-20
 (at end of time). 22. 13-686, 12-580, 9-7. 23. \$191-18.
 24. \$3031-89. 25. \$14,556-53.

EXERCISES. Pages 196-202.

1. \$949-53. 2. \$2127-57. 3. \$1374-48. 4. (1) \$890-36;
 (2) \$3679-88; (3) \$269-06. 5. \$462-68. 6. \$1699-10, or
 \$1699-47 as different Tables are used. 7. \$7867-45. 8. \$296-41.
 9. \$494-01. 10. \$2945-56. 11. \$4134-97 (or \$4135-03 by
 better tables). 12. (1) \$238-53; (2) \$566-39; (3) \$320-31.
 13. \$2208-02. 14. \$1118-80. 15. \$2250. 16. \$4666-67.
 17. \$3594-20. 18. 4% . 19. \$611-41. 20. \$412-46
 (or \$412-44). 21. \$1237-77. 22. Insurance by \$3166-44.