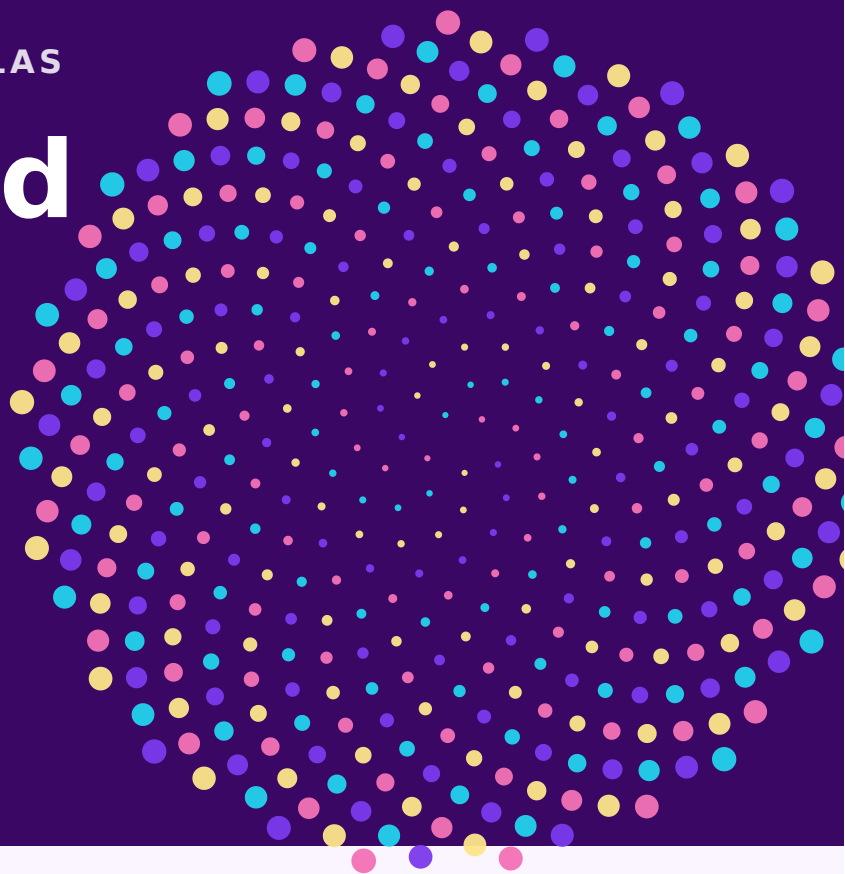


Number and algebra



Standard form $a \times 10^k, \quad 1 \leq a < 10, \quad k \in \mathbb{Z}$

Arithmetic sequence $u_n = u_1 + (n - 1)d$

B

Arithmetic series $S_n = \frac{n}{2}(2u_1 + (n - 1)d) = \frac{n}{2}(u_1 + u_n)$

B

Common difference $d = u_{n+1} - u_n$

Geometric sequence $u_n = u_1 r^{n-1}$

B

Geometric series, $r \neq 1$ $S_n = \frac{u_1(r^n - 1)}{r - 1} = \frac{u_1(1 - r^n)}{1 - r}$

B

Compound interest (k times a year, n years, $r\%$) $FV = PV\left(1 + \frac{r}{100k}\right)^{kn}$

B

Depreciation at $r\%$ a year $V = V_0\left(1 - \frac{r}{100}\right)^n$

B given in the exam. Learn the rest.