

- 1) A sequence is defined by the mathematical formula $a_n = \frac{1}{n+1}$. What is the 31st term of this sequence?
- (a) $1/31$
 - (b) $1/32$
 - (c) 31
 - (d) 32
- 2) Given the arithmetic sequence -9, -4, 1, 6, 11, ... What is the 72nd term?
- (a) 219
 - (b) 279
 - (c) 312
 - (d) 346
- 3) Identify the sum of the first 100 terms of the given arithmetic sequence in item #2.
- (a) 12925
 - (b) 18740
 - (c) 21565
 - (d) 23850
- 4) What is the 11th term of the geometric sequence: -5, $5/2$, $-5/4$, ...
- (a) $-5/1024$
 - (b) $5/2048$
 - (c) $-5/4096$
 - (d) $5/512$
- 5) Determine the sum of $\frac{1}{3} + \frac{1}{6} + \frac{1}{12} + \dots$
- (a) $\frac{2}{3}$
 - (b) $\frac{2}{3}$
 - (c) $\frac{1}{3}$
 - (d) 3