

Name: _____

Class: _____

Mark: _____

1. Find a formula for the n^{th} term. [There is no space before or after the sign.]

a. 2, 5, 10, 17, ... n^{th} term = _____

b. 11, 14, 19, 26, ... n^{th} term = _____

c. -1, 2, 7, 14, ... n^{th} term = _____

d. -7, -4, 1, 8, ... n^{th} term = _____

e. $\frac{1}{3}, \frac{2}{5}, \frac{3}{7}, \frac{4}{9}, \dots$ n^{th} term = _____

f. $\frac{5}{1}, \frac{5}{4}, \frac{5}{9}, \frac{5}{16}, \dots$ n^{th} term = _____

g. $\frac{3}{1}, \frac{4}{2}, \frac{5}{3}, \frac{6}{4}, \dots$ n^{th} term = _____

2. Given that

Sequence $S = 1, 4, 9, 16, \dots$ Sequence $T = 5, 9, 13, 17, \dots$ Sequence $R = 4, 5, 4, 1, \dots$ a. Find the next two terms of sequence S and T S : _____, _____ T : _____, _____b. Find the term that has value 81 in sequence T . _____c. Find the n^{th} term for sequence S and T . S : _____ T : _____d. Find the n^{th} term for sequence R . R : _____