

- 25 (a) Each term can be found by subtracting 1.5 from the previous term. A numerical representation for the first eight terms is shown in *Figure 25a*.

n	1	2	3	4	5	6	7	8
a_n	7.5	6	4.5	3	1.5	0	-1.5	-3

Figure 25a

- (b) A graphical representation includes the points in the above table. See *Figure 25b*. Notice that the points lie on a line with slope -1.5 , because the sequence is arithmetic.

$[0, 12, 1]$ by $[-4, 8, 1]$

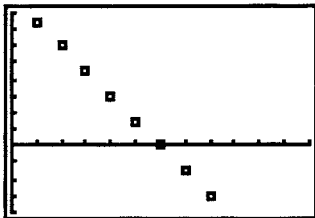


Figure 25b

- (c) To find the symbolic representation, we will use the formula $a_n = a_1 + (n-1)d$, where $a_n = f(n)$. The common difference of this sequence is $d = -1.5$ and the first term is $a_1 = 7.5$. Therefore, a symbolic representation of the sequence is given by $a_n = 7.5 + (n-1)(-1.5)$ or $a_n = -1.5n + 9$.