Quaadratic Sequence

1. **Find the next two term for each quadratic sequence.**

   a. 4, 6, 10, 16, 24, _____, _____

   b. 2, 5, 10, 17, 26, _____, _____

   c. 3, 9, 19, 33, 51, _____, _____

   d. 50, 48, 44, 38, 30, _____, _____

2. List the first 5 terms of the sequences with n^{th} term:

   a. $n^2 + 4$

   b. $n^2 - 2$

   c. $2n^2$

   d. $\frac{1}{4}n^2$

   e. $\frac{3}{5}n^2$

3. Find the nth term of each of these sequences.

    (a) 4, 7, 12, 19, 28, 39, 52 ...   (b) 51, 54, 59, 66, 75, 86, 99 ...   (c) −5, −2, 3, 10, 19, 30...

4. A sequence has an nth term of $n^2 + 2n − 5$ Work out which term in the sequence has a value of 58

5. A sequence has an nth term of $n^2 − 6n + 7$ Work out which term in the sequence has a value of 23.

6. A sequence has an nth term of $n^2 + n − 20$ Work out which term in the sequence has a value of 52.