Generating Terms in a Sequence

Generate the first 5 terms in each sequence. Start off with $n = 1$, then $n = 2$ right up to $n = 5$

(1) $n^2 + 6$

(2) $n^3 - n$

(3) $3n + 7$

(4) $7n^2 + 2n$

(5) 2^n

Describing the Term-to-Term Rule for a Sequence

Describe the term-to-term rule for each sequence below.

(a) $3, \ 6, \ 9, \ 12, \ 15 \ldots \ldots$

(b) $5, 10, 20, 40 \ldots \ldots$

(c) $5, 6, 11, 17, 28 \ldots \ldots$

(d) $500, \ 250, \ 125, \ 62.5 \ldots$

(e) $2, 12, 22, 32, 42 \ldots$

(f) $1, 3, 9, 27, 81 \ldots \ldots$

Finding the nth term of a linear (arithmetic sequence)

Find the nth term rule for each sequence below.

(a) $5, 8, 11, 14, 17 \ldots \ldots$

(b) $2, 6, 10, 14, 18 \ldots \ldots$

(c) $8, 15, 22, 29, 36 \ldots$

(d) $6, 8, 10, 12, 14 \ldots \ldots$

(e) $5, 11, 17, 23, 29 \ldots$

(f) $10, 7, 4, 1, -2 \ldots$

(g) $15, 11, 7, 3 \ldots \ldots$

(h) $5, 3, 1, -1, -3 \ldots \ldots$

(i) $4, 10, 16, 22, 28 \ldots$

(j) $-1, 6, 13, 20 \ldots \ldots \ldots$