Using formulas to find the nth term in sequences.

Answer the following questions. Work the problems in your exercise books then fill-in-the blanks.

1. A sequence is defined by the formula $a_n = 6n - 2$.
(a) Calculate the first 5 terms of the sequence.

_____, _____, _____, _____, _____, ⋯

(b) What is the difference between the terms of the sequence?

_____ - _____ = _____

2. A sequence is defined by the formula $b_n = 8n + 2$.
(a) Calculate the first 5 terms of the sequence.

_____, _____, _____, _____, _____, ⋯

(b) What is the difference between the terms of the sequence?

_____ - _____ = _____

3. A sequence is given by $C_n = 7n - 3$.
(a) Calculate the first 4 terms of the sequence.

_____, _____, _____, _____, ⋯

(b) What is the difference between the terms of the sequence?

_____ - _____ = _____

4. A sequence is given by $p_n = n^2$
(a) Calculate the 5th, 6th, 7th, and 8th terms of the sequence.

_____, _____, _____, _____, ...

(b) Is this an arithmetic, geometric, or special sequence sequence?

_____

5. A sequence is given by the formula $k_n = 11n - 7$.
(a) Calculate the first 4 terms of the sequence in descending form.

_____, _____, _____, _____, ...

(b) Is this an arithmetic, geometric, or special sequence?

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