Arithmetic Sequences Practice Worksheet

**Name:**  **Date:**

1. 1. Find the next two terms in each sequence:

* a) 2, 5, 8, 11, \_\_\_, \_\_\_

* b) 30, 25, 20, 15, \_\_\_, \_\_\_

1. 2. Identify the first term (a) and the common difference (d):

* a) Sequence: 4, 10, 16, 22, ...

* b) Sequence: 100, 90, 80, 70, ...

1. 3. Write a formula for the nth term (tₙ) of each sequence and find the 10th term:

* a) 3, 6, 9, 12, ...

* b) 20, 17, 14, 11, ...

1. 4. Solve: How many terms are in this arithmetic sequence?

* First term: 7

* Common difference: 4

* Last term: 55

1. 5. The 4th term of a sequence is 22 and the 9th term is 42.

* a) What is the common difference?

* b) What is the first term?

* c) What is the formula for tₙ?

1. 6. In an arithmetic sequence, the 7th term is 75 and the 12th term is 105.

* a) Find the value of the 1st term.

* b) What is the value of the 20th term?

* c) How many terms are in the sequence if the last term is 180?