Finding the nth term of an Arithmetic Sequence

$$a_n = a_1 + (n-1)d$$

1. Find the 21st term of the sequence: 4, 9, 14, 19, …

2. Find the 101st term of the sequence: 12, 20, 28, 36, …

3. Find the 31st term of the sequence: 12, 6, 0, –6, …

4. Determine the first 4 terms of an arithmetic sequence if $a_1 = 1$ and $d = 5$.

5. Find the 5 arithmetic means between 11 and 29.

6. A teacher earns \$35,000 in their first year of teaching. He receives annual increases in salary of \$1250. What will his salary be during his fifteenth year of teaching?

7. Juan went to work as an assistant buyer in a department store at a salary of \$18,000 per year. With expected yearly increases of \$1200, when will his salary reach \$40,000?

8. How much did an engineer earn in 20 years if his starting salary was \$50,000 and she received annual increases of \$1500?