

Lesson 2 Homework Practice

Function Rules

Use words and symbols to describe the value of each term as a function of its position. Then find the value of the sixteenth term in the sequence.

1.

Position	2	3	4	5	n
Value of Term	8	12	16	20	■

2.

Position	8	9	10	11	n
Value of Term	14	15	16	17	■

3.

Position	11	12	13	14	n
Value of Term	4	5	6	7	■

4.

Position	21	22	23	24	n
Value of Term	12	13	14	15	■

Determine how the next term in each sequence can be found. Then find the next two terms in the sequence.

5. 3, 16, 29, 42, ...

6. 21, 25, 29, 33, ...

7. 1.2, 3.5, 5.8, 8.1, ...

Find the missing number in each sequence.

8. 5, ■, 10, $12\frac{1}{2}$, ...

9. 11.5, 9.4, ■, 5.2, ...

10. 40, ■, $37\frac{1}{3}$, 36, ...

11. **MEASUREMENT** There are 52 weeks in 1 year. In the space at the right, make a table and write a function rule relating the number of weeks to the number of years for 1, 2, 3, and n years. Then find Hana's age in weeks if she is 11 years old.

12. **SCIENCE** A bacteria population increases every hour. At 12 P.M., there are 5 cells. At 1 P.M., there are 10 cells. At 2 P.M., there are 20 cells. At 3 P.M., there are 40 cells. If this patterns continues, how many cells will there be at 7 P.M.? Explain.