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## Function Rules and Equations Homework Practice

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 | $\square$ |

4. 

| Position | 21 | 22 | 23 | 24 | $n$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Value of Term | 12 | 13 | 14 | 15 | $\square$ |

5. 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.
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$\qquad$

## Write an equation to represent each function.

6. 

| Input, $\boldsymbol{x}$ | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Output, $\boldsymbol{y}$ | 7 | 14 | 21 | 28 | 35 |

8. 

| Input, $\boldsymbol{x}$ | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Output, $\boldsymbol{y}$ | 13 | 26 | 39 | 52 | 65 |

10. 

| Input, $\boldsymbol{x}$ | 0 | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Output, $\boldsymbol{y}$ | 1 | 6 | 11 | 16 | 21 |

7. 

| Input, $\boldsymbol{x}$ | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Output, $\boldsymbol{y}$ | 0 | 9 | 18 | 27 | 36 |

9. 

| Input, $\boldsymbol{x}$ | 10 | 20 | 30 | 40 | 50 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Output, $\boldsymbol{y}$ | 1 | 2 | 3 | 4 | 5 |

11. 

| Input, $\boldsymbol{x}$ | 4 | 8 | 12 | 16 | 20 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Output, $\boldsymbol{y}$ | 21 | 37 | 53 | 69 | 85 |

12. FISHING A lake owner charges $\$ 80$ for a day's guided fishing trip, plus $\$ 5$ for each pound of fish caught. Write the equation that describes the total charge $c$ for the number of pounds $p$ of fish. Make a function table for the input-output values.

| $\boldsymbol{p}$ | $\mathbf{8 0}+\mathbf{5 p}$ | $\boldsymbol{e}$ |
| :---: | :--- | :--- |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

