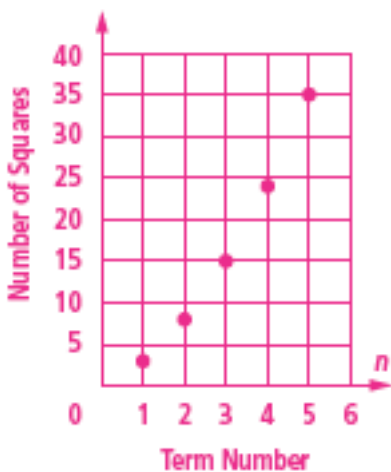


Algebra 1-4 Answers

| $n$ | $n(n + 2)$ |
|-----|------------|
| 1   | 3          |
| 2   | 8          |
| 3   | 15         |
| 4   | 24         |
| 5   | 35         |

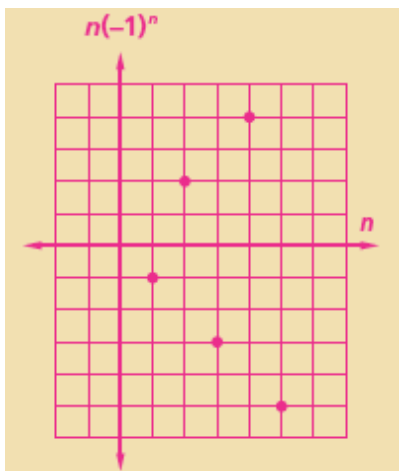
1a)



1b)

| $n$ | $n \cdot (-1)^n$ |
|-----|------------------|
| 1   | -1               |
| 2   | 2                |
| 3   | -3               |
| 4   | 4                |
| 5   | -5               |

4)



| $x$  | Value of Expression |
|------|---------------------|
| -3   | ? 4                 |
| 0    | ? -2                |
| 2    | ? -6                |
| ? -1 | 0                   |
| ? -4 | 6                   |
| ? 1  | -4                  |

5)

8)  $\{20, 21, 22, 23, \dots\}$

9)  $\{x \mid x \text{ is an integer and } x < -8\}$

10) a.; \$90

11) Scatterplot to b; Connected graph to a

12) a

13) d

14) b

16) Sample:  $n=1, x=0$

18a) Sample:

If  $x=0$  then  $13=13$

If  $x=2$  then  $9=9$

If  $x=-3$  then  $19=19$

18b) The pattern holds for all real numbers, since the expressions are equivalent

20c) 25

21) 18 students