## UNIT 2 • REASONING WITH LIINEAR EQUATIONS AND INEQUALITIES

## Practice 2.9.1: Sequences As Functions

Use what you know about sequences to complete each problem.

1. What is the fourth term in the sequence given by the formula $a_{n}=10 n-12$ ?
2. What is the fourth term in the sequence given by the formula $a_{n}=a_{n-1}+3$ if $a_{1}=-4$ ?
3. Graph the first 5 terms of the sequence given by the formula $a_{n}=5 n-7$.
4. Graph the first 5 terms of the sequence given by the formula $a_{n}=2 n-2$.
5. What is the third term in the sequence given by the formula $a_{n}=a_{n-1}+4$ if $a_{1}=2$ ?
6. What is the fourth term in the sequence given by the formula $a_{n}=13-2 n$ ?
7. Complete and graph the sequence: $2,6,10,14, a_{5}, 22$.
8. Complete and graph the sequence: $13,21,29,37, a_{5}, a_{6}$.
9. A radio show breaks for news every 30 minutes. After every fourth news report, the newscaster reads the daily sports highlights. If the radio show began at 12:01 P.M. and the first news report was read at $12: 31$ P.M., at what time will the daily sports highlights be read?
10. Water stations are set up periodically along a marathon route. The water stations are set up every 3.5 miles. If the first station is at the 5 -mile mark, at what mile mark will the fifth water station be?
