UNIT 2 • REASONING WITH LINEAR EQUATIONS AND INEQUALITIES Lesson 9: Sequences As Functions

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 $a_n = 10n 12$?
- 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 $a_n = 5n 7$.
- 4. Graph the first 5 terms of the sequence given by the formula $a_n = 2n 2$.
- 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 $a_n = 13 2n$?
- 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?

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