Name

Class

Date

Exploring Periodic Data

13-1

**Practice**

*Form K*

**Trace two complete cycles of the functions below.**

 **1.** **2.**

 **3. 4.**

**Tell whether the function is periodic. Find the period if the function is periodic.**

 **5. 6.**

 **7. 8.**

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**Practice** (continued)

*Form K*

**9.** The amplitude of a function is  (maximum value – minimum value).

The maximum value of a periodic function is 12.

The minimum value of a periodic function is 4.

What is the amplitude?

**10. Reasoning** Do you use *x*-values or *y*-values to calculate the amplitude of a periodic function? Explain.

**Find the maximum, minimum, and amplitude of each periodic function.**

 **11. 12.**

**13.** Suppose *f* is a function with a period of 7. *f*(1) is 10. What is *f* (8)? How do you know?

**14. Open-Ended** Draw a periodic function on the coordinate axes withan amplitude of 3. Label your graph. What are the period, maximum, and minimum values of the function?

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