

PRACTICE AND PROBLEM SOLVING

Independent Practice

For Exercises	See Example
12	1
13	2
14–15	3
16–17	4
18–19	5

my.hrw.com



Online Extra Practice

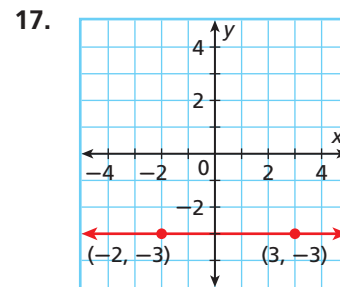
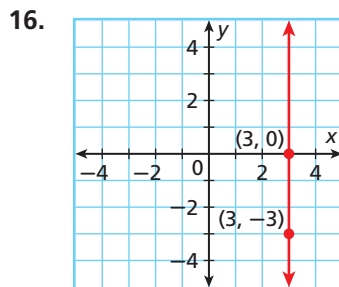
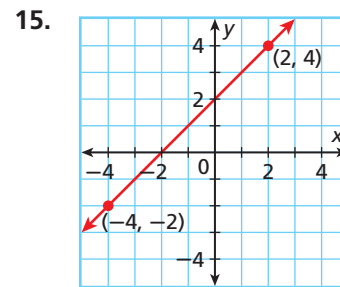
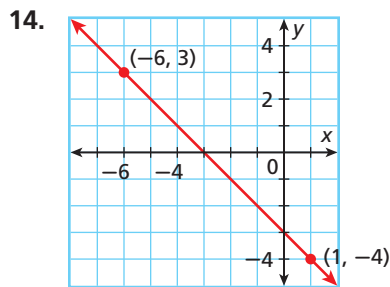
12. The table shows the length of a baby at different ages. Find the rate of change for each time interval. Round your answers to the nearest tenth. During which time interval did the baby have the greatest growth rate?

Age (mo)	3	9	18	26	33
Length (in.)	23.5	27.5	31.6	34.5	36.7

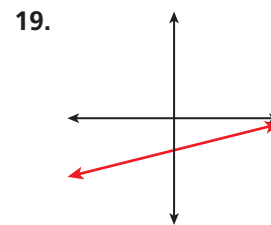
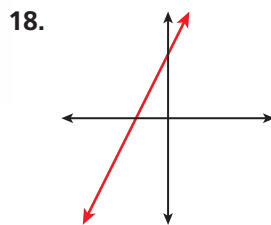
13. The table shows the distance of an elevator from the ground floor at different times. Graph the data and show the rates of change.

Time (s)	0	15	23	30	35
Distance (m)	30	70	0	45	60

Find the slope of each line.



Tell whether the slope of each line is positive, negative, zero, or undefined.



Travel

The Incline Railway's climb up Lookout Mountain has been called "America's Most Amazing Mile." A round-trip on the railway lasts about 1.5 hours.

20. **Travel** The Lookout Mountain Incline Railway in Chattanooga, Tennessee, is the steepest passenger railway in the world. A section of the railway has a slope of about 0.73. In this section, a vertical change of 1 unit corresponds to a horizontal change of what length? Round your answer to the nearest hundredth.

21. **Critical Thinking** Previously you learned that in a linear function, a constant change in x corresponds to a constant change in y . How is this related to slope?