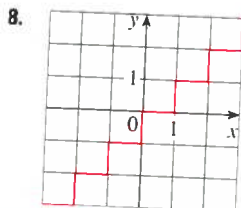
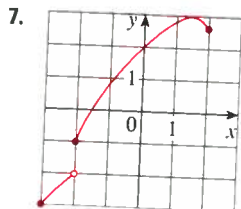
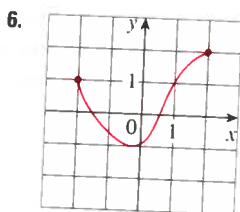
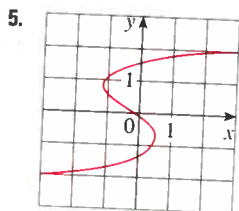
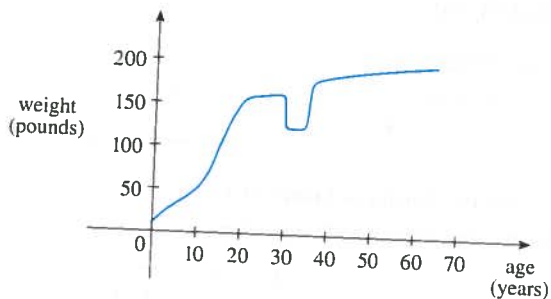


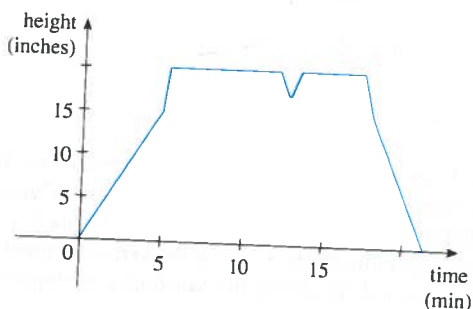
5–8 Determine whether the curve is the graph of a function of x . If it is, state the domain and range of the function.



9. The graph shown gives the weight of a certain person as a function of age. Describe in words how this person's weight varies over time. What do you think happened when this person was 30 years old?



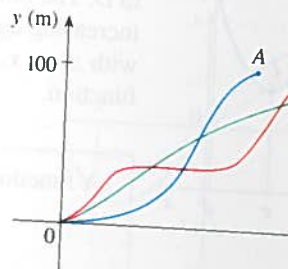
10. The graph shows the height of the water in a bathtub as a function of time. Give a verbal description of what you think happened.



11. You put some ice cubes in a glass, fill the glass with cold water, and then let the glass sit on a table. Describe how the temperature of the water changes as time passes. Then sketch a rough graph of the temperature of the water as a function of the elapsed time.

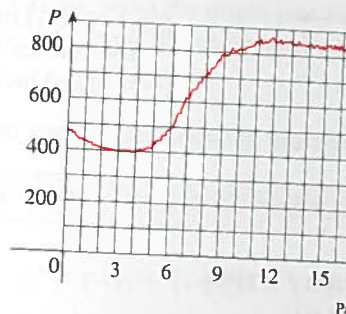
12. Three runners compete in a 100-meter race. The graph depicts the distance run as a function of time for each runner. Describe

in words what the graph tells you about the race? Did each runner finish the race?



13. The graph shows the power consumption in San Francisco. (P is measured in kilowatts starting at midnight.)

- What was the power consumption at 6 A.M.?
- When was the power consumption the highest? Do these times seem reasonable?



14. Sketch a rough graph of the number of hours of daylight as a function of the time of year.

15. Sketch a rough graph of the outdoor temperature as a function of time during a typical spring day.

16. Sketch a rough graph of the market value of a stock as a function of time for a period of 20 years, assuming the stock is well maintained.

17. Sketch the graph of the amount of a particular good sold by a store as a function of the price of the good.

18. You place a frozen pie in an oven and bake it. Then you take it out and let it cool before eating it. Describe how the temperature of the pie changes as time passes. Then sketch a rough graph of the temperature of the pie as a function of time.

19. A homeowner mows the lawn every Wednesday. Sketch a rough graph of the height of the grass as a function of time over the course of a four-week period.

20. An airplane takes off from an airport and lands at another airport, 400 miles away. If t represents time in minutes since the plane has left the terminal building, sketch a rough graph of the distance from the terminal building as a function of time.