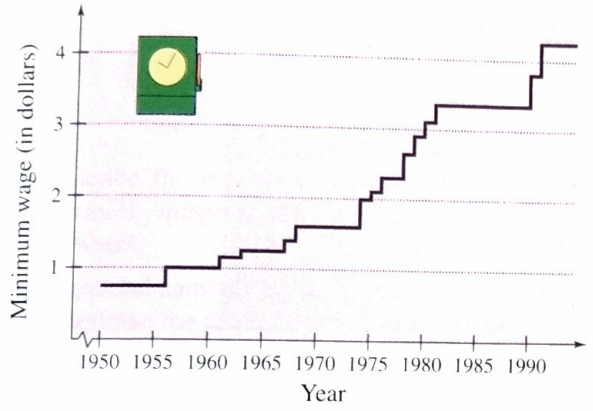
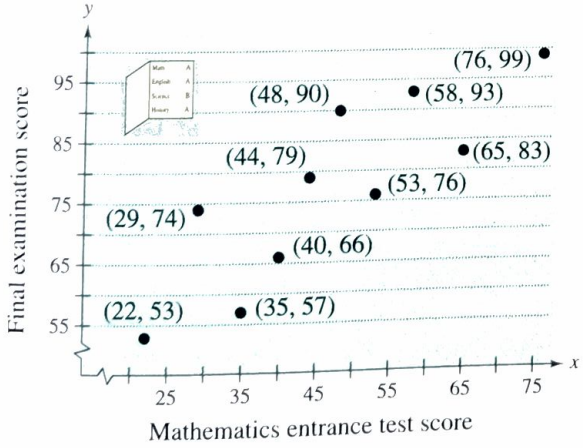
Minimum Wage **In Exercises 33 and 34, refer to the figure.** (Source: U.S. Department of Labor)



33. During which decade did the minimum wage increase most rapidly?

34. Approximate the percent increase in the minimum wage from 1990 to 1994.

Data Analysis **In Exercises 35 and 36, refer to the figure, which shows the mathematics entrance test scores x, and the final examination scores y, in an algebra course for a sample of 10 students.**



35. Find the entrance exam score of any student with a final exam score in the 80's.

36. Does a higher entrance exam score imply a higher final exam score? Explain.

In Exercises 37–40, find the distance between the points. (*Note*: In each case the two points lie on the same horizontal or vertical line.)

37. $(6, -3), (6, 5)$

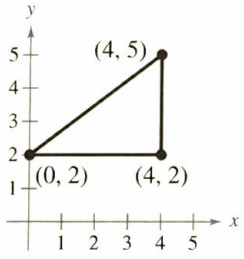
38. $(1, 4), (8, 4)$

39. $(-3, -1), (2, -1)$

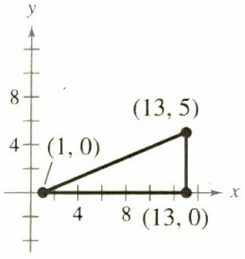
40. $(-3, -4), (-3, 6)$

In Exercises 41–44, (a) find the length of each side of a right triangle, and (b) show that these lengths satisfy the Pythagorean Theorem.

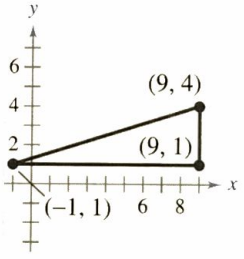
41.



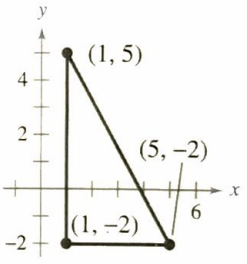
42.



43.



44.



In Exercises 45–56, (a) plot the points, (b) find the distance between the points, and (c) find the midpoint of the line segment joining the points.

45. $(1, 1), (9, 7)$

46. $(1, 12), (6, 0)$

47. $(-4, 10), (4, -5)$

48. $(-7, -4), (2, 8)$

49. $(-1, 2), (5, 4)$

50. $(2, 10), (10, 2)$

51. $\left(\frac{1}{2}, 1\right), \left(-\frac{5}{2}, \frac{4}{3}\right)$

52. $\left(-\frac{1}{3}, -\frac{1}{3}\right), \left(-\frac{1}{6}, -\frac{1}{2}\right)$

53. $(6.2, 5.4), (-3.7, 1.8)$

54. $(-16.8, 12.3), (5.6, 4.9)$

55. $(-36, -18), (48, -72)$

56. $(1.451, 3.051), (5.906, 11.360)$