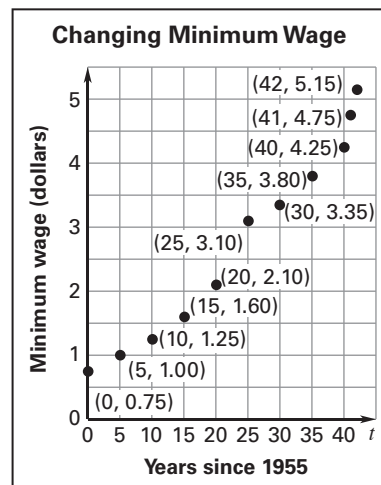


LESSON
3.4**Interdisciplinary Application***For use with the lesson "Find Slope and Rate of Change"***Minimum Wage**

History The smallest amount of money an employer may legally pay a worker per hour is called a minimum wage. In 1938, President Franklin D. Roosevelt signed the Fair Labor Standards Act. At the time, the act was limited to a few industries and only affected about one-fifth of the labor force. The act established in these industries a minimum wage of 25 cents per hour, banned child labor, and set other standards. Through the years, the act has been amended several times to cover more workers and raise the minimum wage. The minimum wage has increased over the years. For example, the per hour minimum wage was \$1.00 in 1956, \$2.00 in 1974, \$3.10 in 1980, \$4.25 in 1991, and \$5.15 in 1997. It should be noted that when a state requires a higher minimum wage than the federal standard, the worker is paid the state minimum wage.

In Exercises 1–4, use the graph at the right.

1. Estimate the average rate of change in the minimum wage from 1955 to 1995 in dollars per year.
2. Estimate the average rate of change in the minimum wage from 1990 to 1997 in dollars per year.
3. Which five-year period had the biggest wage increase?
4. Use the graph to estimate the minimum wage in 2000. Compare your estimate with the actual minimum wage in 2000. Why might your estimate be different from the actual wage?
5. The table below shows the value of the minimum wage from 1955 to 2004 in 1996 dollars. Graph the function represented by the table.

**Minimum wage (in 1996 Dollars)**

| | | | | | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Year | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 |
| Value | \$4.39 | \$5.77 | \$5.58 | \$5.43 | \$5.39 | \$5.30 | \$6.03 | \$5.97 | \$6.41 | \$6.33 |
| Year | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 |
| Value | \$6.23 | \$6.05 | \$6.58 | \$7.21 | \$6.84 | \$6.47 | \$6.20 | \$6.01 | \$5.65 | \$6.37 |
| Year | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
| Value | \$6.12 | \$6.34 | \$5.95 | \$6.38 | \$6.27 | \$5.90 | \$5.78 | \$5.45 | \$5.28 | \$5.06 |
| Year | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| Value | \$4.88 | \$4.80 | \$4.63 | \$4.44 | \$4.24 | \$4.56 | \$4.90 | \$4.75 | \$4.61 | \$4.50 |
| Year | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| Value | \$4.38 | \$4.75 | \$5.03 | \$4.96 | \$4.85 | \$4.69 | \$4.56 | \$4.49 | \$4.39 | \$4.28 |