|  |
| --- |
| 14. The Trade Union Association of Orlando, Florida, maintains indexes on the hourly wages for a number of the trades. Unfortunately, the indexes do not all have the same base periods. Listed below is information on plumbers and electricians. Shift the base periods to 2000 and compare the hourly wage increases for the period from 2000 to 2006. |

|  |  |  |
| --- | --- | --- |
| Year | Plumbers (1995 = 100) | Electricians (1998 = 100) |
| 2000 | 133.8 | 126.0 |
| 2006 | 159.4 | 158.7 |

|  |
| --- |
| Plumber = Electrician = |
| Plumber’s wages have increased percent, where as electrician has increased percent. |

16. 2. Sam Steward is a freelance Web page designer. Listed below are his yearly wages for the   
years 2002 through 2008. Also included is an [industry](http://www.justanswer.com/math/21p2h-1-trade-union-association-orlando-florida-maintains.html) index for Web page designers that   
reports the rate of wage inflation in the industry. This index has a base period of 1995.   
Compute Sam’s real income for the period. Did his wages keep up with inflation, or did he   
lose ground?   
Year     Wages ($000)     Index (1995 = 100)   
2002     134.8     160.6   
2004     145.2     173.6   
2006     156.6     187.9   
2008     168.8     203.3 

**38. Determine a value index for 2006 using 2000 as the base period.**

Below is information on food items for the years 2000 and 2006

.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Price | | Quantity | |
| 2000 | 2006 | 2000 | 2006 |
| Cabbage (pound) | $0.06 | $0.05 | 2,000 | 1,500 |
| Carrots (bunch) | 0.10 | 0.12 | 200 | 200 |
| Peas (quart) | 0.20 | 0.18 | 400 | 500 |
| Endive (bunch) | 0.15 | 0.15 | 100 | 200 |

**a.** Determine a value index for 2006 using 2000 as the base period.

b. Compute *Paasche’s index* for 2006 using 2000 as the base period.

50. Determine a value index for 2006 using 1990 as the base period.

Production figures for those two periods are given below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Price | | Quantity | |
| 1990 | 2006 | 1990 | 2006 |
| Aluminum Cans (cents per pound) | $0.287 | $0.76 | 1,000 | 1,200 |
| Natural Gas (1,000 cubic feet) | 0.17 | 2.50 | 5,000 | 4,000 |
| Petroleum (barrel) | 3.18 | 26.00 | 60,000 | 60,000 |
| Platinum (troy ounce) | 133.00 | 490.00 | 500 | 600 |