**Modified Exponential Trend Equation**

Consider the following data on population size of a country over a number of years. Fit

1. a modified exponential trend equation,
2. a Gompertz curve,
3. a logistic curve to the given data.

Also make a comparison among the three.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Population | Year | Population | Year | Population |
| |  | | --- | | 1951 | | 1952 | | 1953 | | 1954 | | 1955 | | 1956 | | 1957 | | 1958 | | 1959 | | 1960 | | 1961 | | 1962 | | 1963 | | 304454  316700  326372  334342  343838  350333  356195  361444  366253  372665  384773  395891  407024 | |  | | --- | | 1964 | | 1965 | | 1966 | | 1967 | |  | | 1968 | | 1969 | | 1970 | | 1971 | | 1972 | | 1973 | | 1974 | | 1975 | | 1976 | | |  | | --- | | 417023 | | 427330 | | 440913 | | 458438 | | 479938 | | 500378 | | 520174 | | 547563 | | 558030 | | 568500 | | 584552 | | 594518 | | 605932 | | |  | | --- | | 1977 | | 1978 | | 1979 | | 1980 | | 1981 | | 1982 | | 1983 | | 1984 | | 1985 | | 1986 | | 1987 | | 1988 | | |  | | --- | | 618210 | | 627238 | | 636442 | | 648922 | | 667381 | | 684771 | | 697570 | | 708066 | | 724952 | | 746560 | | 767648 | | 792296 | |