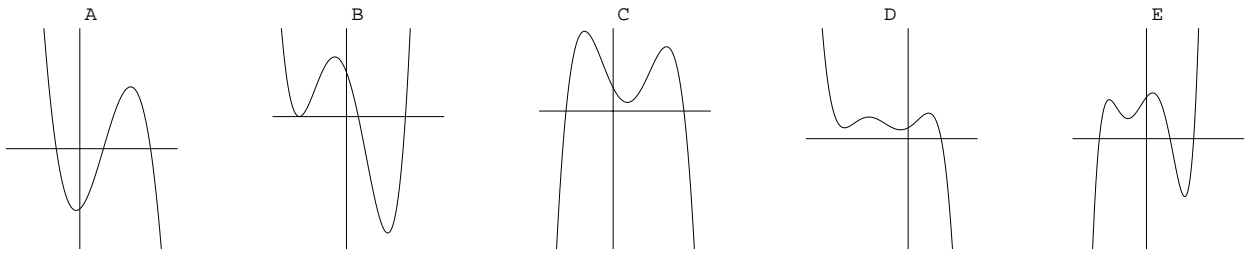


8. Assume that each of the graphs below is of a polynomial. For each graph determine **BOTH** the minimum possible degree of the polynomial **AND** whether the leading coefficient of the polynomial is positive or negative. (You may assume the picture shows the global behavior.)



9. The table below contains data for three different functions.

- Which (if any) of these functions are linear functions? For those functions which are linear, find the formula.
- Which (if any) of these functions are exponential functions? For those functions which are exponential, find the formula.

x	$f(x)$	$g(x)$	$h(x)$
-2	42	27	32
-1	39	45	48
0	36	75	72
1	33	105	108
2	30	135	162

10. The figure below is the graph of a function f where $f(t)$ is the number (in millions) of motor vehicles registered in the world in the year $1900 + t$.

- Is f invertible? Explain.
- Evaluate $f^{-1}(400)$.
- What is the meaning of $f^{-1}(400)$ in practical terms?
- Sketch the graph of f^{-1} .

