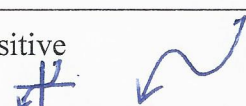
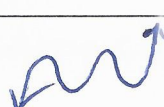
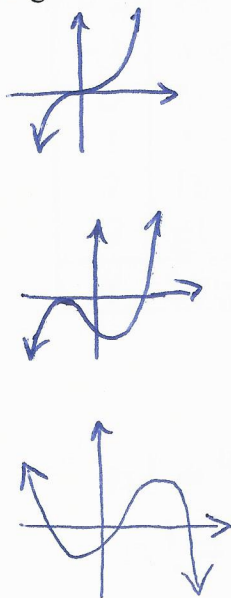


Degree (n)	Leading Coefficient	End Behaviour	highest # of local max/min	highest # of x-intercepts
2	positive	As $x \rightarrow \infty, y \rightarrow \infty$ As $x \rightarrow -\infty, y \rightarrow \infty$ Same end behaviour	①	2
2	negative	As $x \rightarrow +\infty, y \rightarrow -\infty$ As $x \rightarrow -\infty, y \rightarrow -\infty$	①	2
3	positive 	opposite end behaviour As $x \rightarrow +\infty, y \rightarrow +\infty$ As $x \rightarrow -\infty, y \rightarrow -\infty$	②	3
3	negative	As $x \rightarrow +\infty, y \rightarrow -\infty$ As $x \rightarrow -\infty, y \rightarrow +\infty$	②	3
4	positive	same end behaviour As $x \rightarrow +\infty, y \rightarrow \infty$ As $x \rightarrow -\infty, y \rightarrow \infty$	1 or ③	4
4	negative	As $x \rightarrow \infty, y \rightarrow -\infty$ As $x \rightarrow -\infty, y \rightarrow -\infty$	3	4
5	positive 	opposite end behaviour As $x \rightarrow +\infty, y \rightarrow +\infty$ As $x \rightarrow -\infty, y \rightarrow -\infty$	4	5
5	negative		4	5

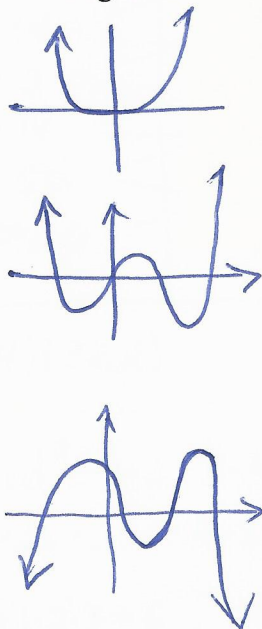
$n-1$        $n$

Sketches of polynomial functions:

Degree 3:



Degree 4:



Degree 5:

