

September 24

GUIDED NOTES: Graphs of Polynomial Functions

$y = 3x^2 + 7x$
 coefficient (pointing to 3)
 exponent (pointing to 2)

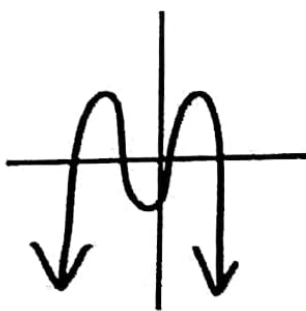
End Behavior - determined by leading term of polynomial

	even exponent	odd exponent
positive coefficient		
negative coefficient		

EX1

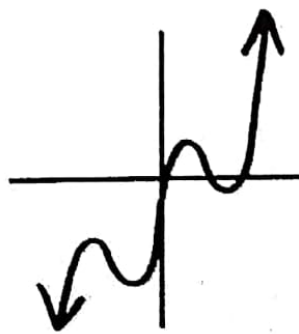
EX2

EX3



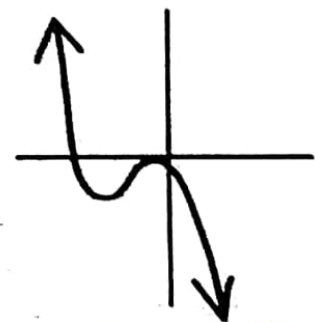
negative coefficient
and even exponent

right $\rightarrow -\infty$
left $\rightarrow -\infty$



positive coefficient
and odd exponent

right $\rightarrow \infty$
left $\rightarrow -\infty$



negative coefficient
and odd exponent

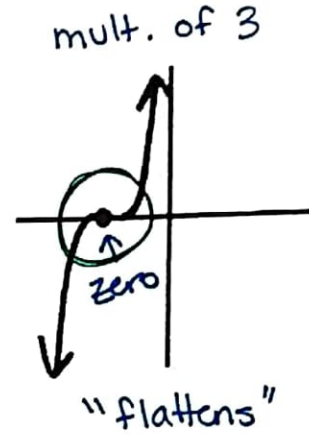
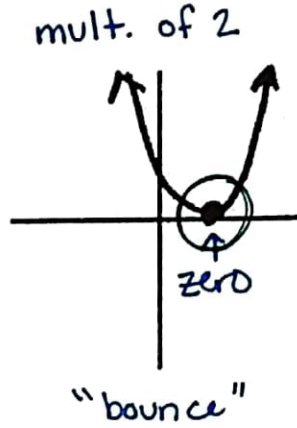
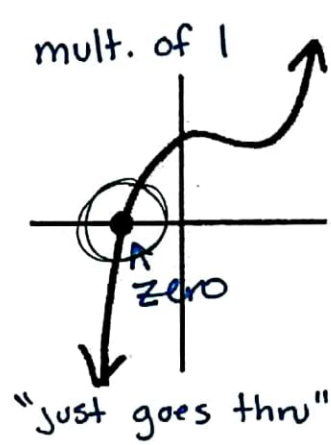
right $\rightarrow -\infty$
left $\rightarrow \infty$

Scanned by CamScanner

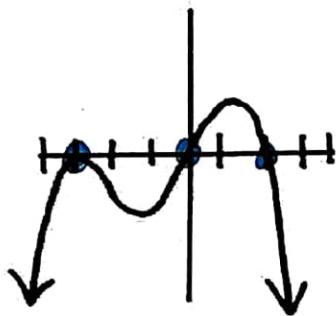
Scanned by CamScanner

zero - any number you can put in for x to make the equation come out equal to 0

Zeros and Multiplicity

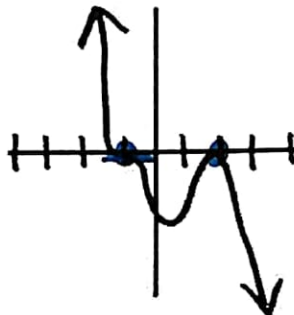


EX4



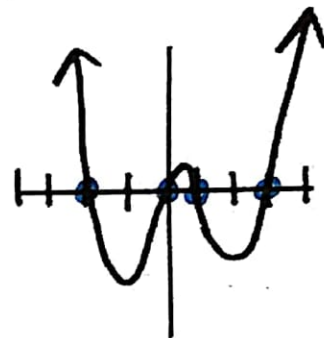
$x = -3$ mult: 2
 $x = 0$ mult: 1
 $x = 2$ mult: 1

EX5



$x = -1$ mult: 3
 $x = 2$ mult: 2

EX6



$x = -2$ mult: 1
 $x = 0$ mult: 1
 $x = 1$ mult: 1
 $x = 3$ mult: 1