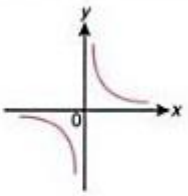
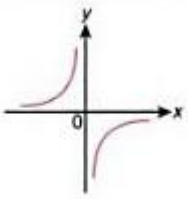
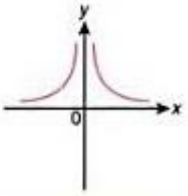
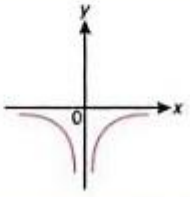
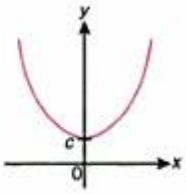
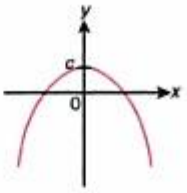
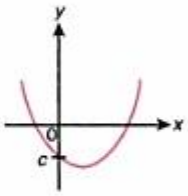
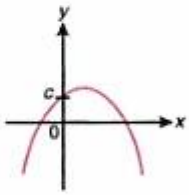
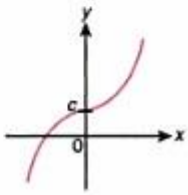
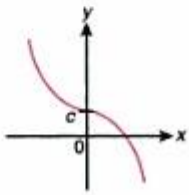
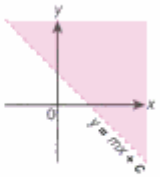
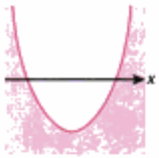
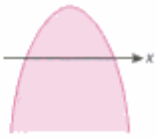
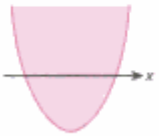
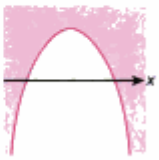
CHAPTER 2: GRAPH FUNCTIONS II

These are all the important graph need to be understand in order to answer questions in this topic.

Inequality	Region
$x < a$; $x > a$	
$y < b$; $y > b$	
$y < mx + c$	 $m > 0$ $m < 0$

Functions	When $a > 0$	When $a < 0$
Inverse $y = \frac{a}{x}$		
$y = \frac{a}{x^2}$		

Functions	When $a > 0$	When $a < 0$
Quadratic $y = ax^2 + c$		
$y = ax^2 + bx + c$		
Cubic $y = ax^3 + c$		

Inequality	Region
$y > mx + c$	 $m > 0$;  $m < 0$
$y \leqslant ax^2 + bx + c$	 $a > 0$;  $a < 0$
$y \geqslant ax^2 + bx + c$	 $a > 0$;  $a < 0$