EXERCISES on PARABOLA

A. Complete the following table:

	GENERAL EQUATION	STANDARD EQUATION	PRINCIPAL AXIS	VERTEX	FOCUS	DIRECTRIX	OPENING	LENGTH OF LATUS RECTUM	ENDPOINTS OF LATUS RECTUM
1.	$x^2 - 2y = 0$								
2.		$y^2 = -3x$							
3.				(0, 0)	(0, – 2)				
4.				(0, 0)		$x = -3/2$			
5.	$y^2 + 4x - 2y - 7 = 0$								
6.		$(x + 3)^2 = 3(y - ½)$							
7.				(3, – 1)			DOWN	12	
8.							RIGHT		(2, – 3); (2, 1)

B. Sketch the graph of each of the parabolas in A on a graphing paper.

C. Solve the following problems on the space below:

1. A parabolic mirror has a depth of 12 cm at the center, and the distance across the top of the mirror is 32 cm. Find the distance from the vertex to the focus.

2. A parabolic arch has a height of 20 m and a width of 36 m at the base. If the vertex of the parabola is at the top of the arch, at which height above the base is it 18 m wide?