

Parabolas

Direction of Directrix	Equation of Directrix	Direction Parabola Opens	Template for Equation	Sign of p	Relative Positions of F (focus), V (vertex), D (directrix)	Sketch of Parabola
horizontal / vertical	$x = \# / y = \#$	up-or-down / sideways	$x^2 = 4py / y^2 = 4px$	positive / negative		
						
			$x^2 = 4py$	positive		
					D V F	
vertical				negative		
					F V D	
		up-or-down		negative		
						
					F V D	
	$x = \#$			positive		
						
					D V F	
			$y^2 = 4px$	negative		
horizontal				positive		