CHAPTER 11.2

January 6, 2023

1. In the each of the following Exercises 1 to 6, find the coordinates of the focus, axis of the parabola, the equation of the directrix and the length of the latus rectum

   1. $y^2 = 2x$
   2. $x^2 = 6y$
   3. $y^2 = -8x$
   4. $x^2 = -16y$
   5. $y^2 = 10x$
   6. $x^2 = -9y$

2. Each of the Exercises 7 to 12, find the equation of the parabola, that satisfies the given conditions:

   7 Focus(6,0); directrix x=-6

   8 Focus(0,3); directrix y=3

   9 Vertex(0,0); Focus(3,0)

   10 Vertex(0,0); Focus(-2,0)

   11 Vertex(0,0) passing through(2,3) and axis is along x-axis

   12 Vertex(0,0) passing through(5,2) symmetric with respect to y-axis