

Parabolas – Writing Equations

Example 5:

Write the equation of the parabola in standard form. Identify the length of the latus rectum and p.

$$x^2 - 2x = 2y - 7$$

Example 6:

Write the equation of the parabola in standard form. Identify the length of the latus rectum and p.

$$y^2 - 4y - 4x = 0$$

Example 7:

Write the standard form equation of each parabola described below.

- a. vertex: (0, 0)
focus: (0, -3)

- b. vertex: (0, 0)
directrix: $x = -4$

- c. vertex: (-1, 2)
focus: (-1, 0)

- d. focus: (2, -3)
directrix: $x = 3$