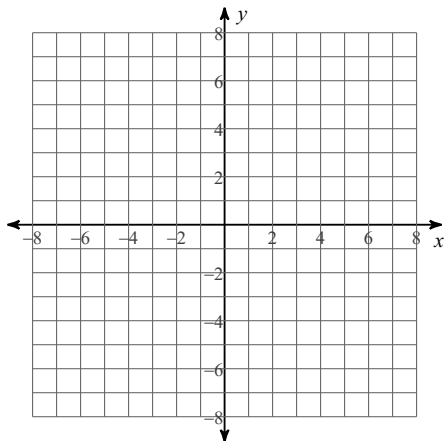


14.5.D1 ~ Parabolas: Graphing & Properties

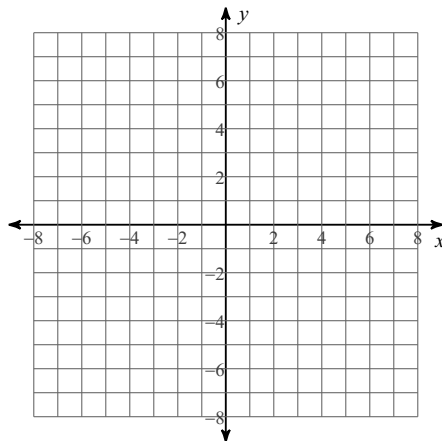
Past due on _____ Period _____

For the parabola, whose standard form equation is given, determine the direction of opening, the coordinates of the vertex, the focus, the equation of the directrix, and the coordinates of the endpoints of the latus rectum of the parabola. Record these in the table provided (on the flip side). Then sketch the graph.

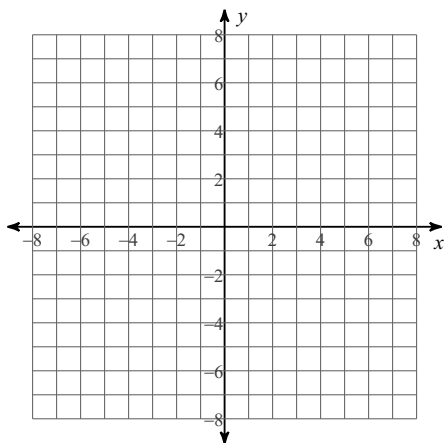
1) $-4(x - 3) = (y - 3)^2$



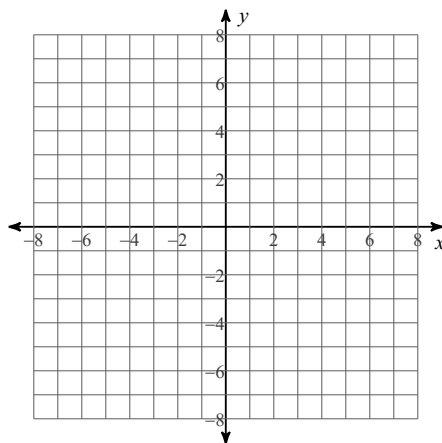
2) $2(y - 3) = (x - 5)^2$



3) $-4(y - 2) = (x - 5)^2$



4) $4(x - 2) = (y - 4)^2$



Consider the parabola, whose equation in general form is given. Complete the square to write the equation in standard form. Then determine the direction of opening, the coordinates of the vertex, the focus, and the equation of the directrix. Record these in the table provided (on the flip side).

5) $y^2 + 2x - 6y - 11 = 0$

6) $x^2 + 16x + 20y + 124 = 0$

7) $-2x^2 - 32x + y - 136 = 0$

8) $-y^2 + x - 8y - 10 = 0$