Name:_____ Date:_____

Simplify Radicals & Vertex of a Quadratic

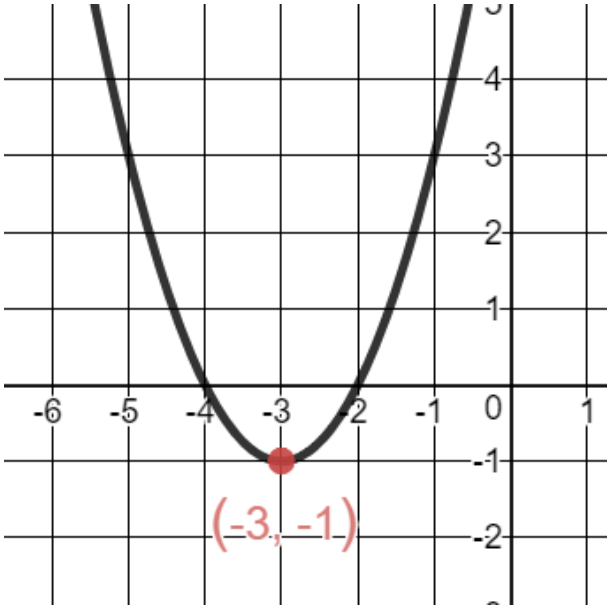
Simplify Radicals:

- Rewrite expression as a list of prime factorization and variables.
- Circle pairs.
- Move to the outside of the radical (square root sign)
- Leave any non-paired numbers or variables on the inside of the radical.

1. $\sqrt{49x^2y^{20}}$

2. $\sqrt{48x^3y^4}$

Vertex Form of a Quadratic: $f(x) = a(x-h)^2 + k$, where (h, k) is the **vertex** of the parabola.



Vertex: Is an ordered pair (x, y), where the parabola is either at a maximum or a minimum.

Example: (-3, -1)

Line of Symmetry: The line of symmetry of a parabola cuts the parabola in half through the vertex.

Example: x = -3