$$2y^2 - \frac{1}{2}x - 12y + 19 = 0$$

Step 1: isolate the variable that is not squared.

$$\frac{1}{2}x = 2y^2 - 12y + 19$$

$$x = \boxed{4y^2 - 24y} + 38$$

Step 2: complete the square for the terms involving the squared variable.

$$x = 4(y^2 - 6y) + 38$$

$$x = 4(y^2 - 6y + 9 - 9) + 38$$

$$x = 4(y^2 - 6y + 9) - 36 + 38$$

$$x = 4(y - \boxed{3})^2 + \boxed{2}$$

Step 3: read off the coordinates of the vertex.

$$V = (2, 3)$$