1. The graph of f(x) = a(x-h)² + k ,where a ≠ 0, is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_ form:  
   With (-----,----) as a vertex.
2. If a >0, then the graph of the parabola is vertically \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. If \_\_\_\_\_\_\_ < a < \_\_\_\_\_\_ , then the graph of the parabola is vertically \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. If a <0 then the graph does a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ across the x-axis.

1. The axis of symmetry of a parabola in vertex form is the line x = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a parabola is the point (h, k).
3. Write the standard form y = 2x² - 4x + 5 in vertex form:

y - \_\_\_\_\_\_\_\_\_\_\_\_\_ = 2x² - 4x keep x² and x-terms in one side.

y- \_\_\_\_ = (\_\_\_) (x² - (\_\_\_)(x) ) factor out the leading coefficient since

we want 1 as leading coefficient.

y-5+ 2( \_\_\_\_\_\_ ) = 2(x² - 2x+ \_\_\_\_\_ ) put the coefficient of x term in half and

square it inside the parenthesis. The same product

should also appear in left hand side.

y - \_\_\_\_\_ = 2(x- \_\_\_\_\_ )² find the perfect square and simplify.

y = 2(x- \_\_\_\_\_ )² + \_\_\_\_\_ Write in vertex form