**PROBLEM SET 2**

**PARABOLAS SET A**

NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SECTION: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STUDENT ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE SUBMITTED: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**NOTE:** Print out this document and write your answers on the spaces provided. Indicate solutions if necessary. Avoid erasures.

**Part One.** Complete the table by determining the (a) orientation of the graph; (b) coordinates of its vertex; (c) coordinates of its foci; (d) equation of the directrix; and (e) axis of symmetry.

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|  | **Equation of the Parabola** | **Orientation** | **Vertex** | **Focus** | **Directrix** | **Axis of Symmetry** |
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Part Two. Transform the following equations of parabolas into their standard forms.

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Part Three. Give the standard form of the equation of the parabola if,

1. V (2, -3); F (5, -3)

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1. V (-6, -6); directrix:

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1. F (-18, -6); directrix:

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**Part Four.** Sketch the graph of the following equations on the Cartesian plane. Construct a table of values to aid you in the graph.

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