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| **Topic 3.14 Polar Function Graphs** | **Rose Curves** |
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| **Practice Problem 1**  graph  The figure shows the graph of a polar function for Which of the following could be an expression for |
| A. |
| B. |
| C. |
| D. |

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| **Practice Problem 2**  graph  A portion of the graph of the polar function where is shown in the polar coordinate system for If which of the following could be the values of and |
| A. and |
| B. and |
| C. and |
| D. and |

**Solutions:**

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| **Practice Problem 1 Solution:**  This is the graph of a polar rose in the form of . The length from the pole to the tip of a petal is 4 units so There are an odd number of petals so represents the number of petals and . |
| **Practice Problem 2 Solution:**  D. and   |  |  | | --- | --- | | The graph of the sinusoidal function shown to the right is positive on the interval . On the interval the polar rose has values of which are positive so the points of the polar rose would be graphed in quadrant 3. | graph |      |  |  |  | | --- | --- | --- | | This is the graph corresponding to choice A. | This is the graph corresponding to choice B. | This is the graph corresponding to choice C. | | graph | graph | graph | |

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