Polar Graphing

**Circles:**

 General Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 1. $r=4sinθ$ 2. $r=-2cosθ$

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{4}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{3π}/\_{4}$$ |  |
| $$π$$ |  |
| $$^{5π}/\_{4}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{7π}/\_{4}$$ |  |
| $$2π$$ |  |

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{4}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{3π}/\_{4}$$ |  |
| $$π$$ |  |
| $$^{5π}/\_{4}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{7π}/\_{4}$$ |  |
| $$2π$$ |  |





**Cardiods:**

 General Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 1. $r=1-sinθ$ 2. $r=2+2cosθ$

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{6}$$ |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{5π}/\_{6}$$ |  |
| $$π$$ |  |
| $$^{7π}/\_{6}$$ |  |
| $$^{4π}/\_{3}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{11π}/\_{6}$$ |  |
| $$2π$$ |  |

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{4}$$ |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{2π}/\_{3}$$ |  |
| $$π$$ |  |
| $$^{5π}/\_{4}$$ |  |
| $$^{4π}/\_{3}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{5π}/\_{3}$$ |  |
| $$2π$$ |  |



**Limacon:**

 General Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 1. $r=3+2cosθ$ 2. $r=4-2cosθ$

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{4}$$ |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{2π}/\_{3}$$ |  |
| $$π$$ |  |
| $$^{5π}/\_{4}$$ |  |
| $$^{4π}/\_{3}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{5π}/\_{3}$$ |  |
| $$2π$$ |  |

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{2π}/\_{3}$$ |  |
| $$π$$ |  |
| $$^{4π}/\_{3}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{5π}/\_{3}$$ |  |
| $$2π$$ |  |





3. $r=1+2cosθ$ 4. $r=1+2sinθ$

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{2π}/\_{3}$$ |  |
| $$^{5π}/\_{6}$$ |  |
| $$π$$ |  |
| $$^{7π}/\_{6}$$ |  |
| $$^{4π}/\_{3}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{5π}/\_{3}$$ |  |
| $$2π$$ |  |

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{6}$$ |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{3π}/\_{4}$$ |  |
| $$^{5π}/\_{6}$$ |  |
| $$π$$ |  |
| $$^{7π}/\_{6}$$ |  |
| $$^{4π}/\_{3}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{5π}/\_{3}$$ |  |
| $$^{11π}/\_{6}$$ |  |
| $$2π$$ |  |



**Rose Curves:**

 General Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 1. $r=2cos2θ$ 2. $r=4sin3θ$

|  |  |
| --- | --- |
|  | r |
| 0 |  |
| $$^{π}/\_{6}$$ |  |
| $$^{π}/\_{4}$$ |  |
| $$^{π}/\_{3}$$ |  |
| $$^{π}/\_{2}$$ |  |
| $$^{3π}/\_{4}$$ |  |
| $$π$$ |  |
| $$^{5π}/\_{4}$$ |  |
| $$^{3π}/\_{2}$$ |  |
| $$^{5π}/\_{3}$$ |  |
| $$^{11π}/\_{6}$$ |  |
| $$2π$$ |  |

|  |  |
| --- | --- |
|  | r |
|  |  |
|  |  |
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