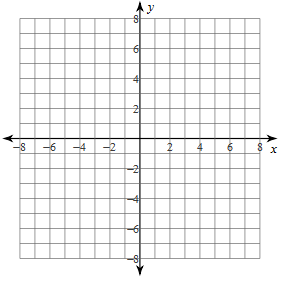
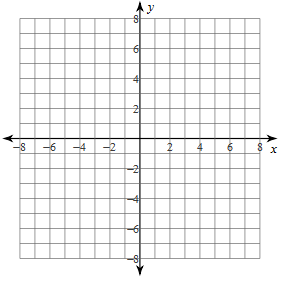
Algebra II Graphing rational functions. Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptotes, and domain and range of each. Then sketch the graph.

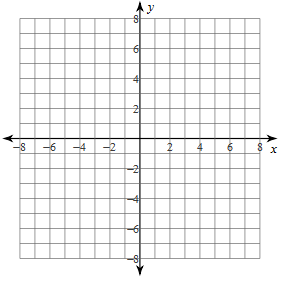
|  |  |
| --- | --- |
| VA |  |
| HA |  |
| X int |  |
| Y int |  |
| Holes |  |
| Domain |  |
| Range |  |

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |

2. Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptotes, and domain and range of each. Then sketch the graph.

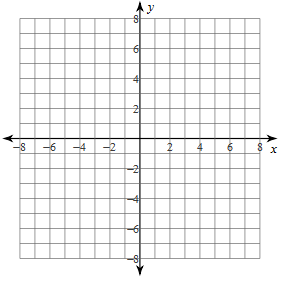
|  |  |
| --- | --- |
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| Domain |  |
| Range |  |

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |

3. Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptotes, and domain and range of each. Then sketch the graph.

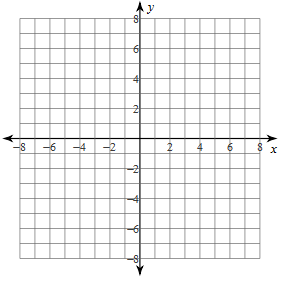
|  |  |
| --- | --- |
| VA |  |
| HA |  |
| X int |  |
| Y int |  |
| Holes |  |
| Domain |  |
| Range |  |

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |

4. Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptotes, and domain and range of each. Then sketch the graph.

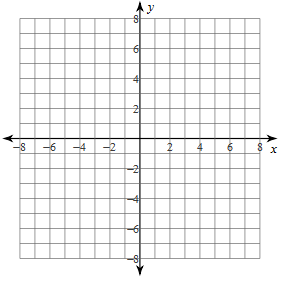
|  |  |
| --- | --- |
| VA |  |
| HA |  |
| X int |  |
| Y int |  |
| Holes |  |
| Domain |  |
| Range |  |

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |

5. Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptotes, and domain and range of each. Then sketch the graph.

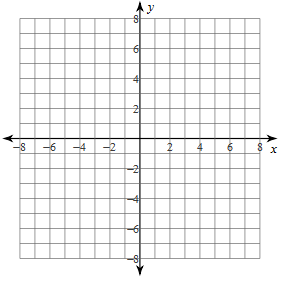
|  |  |
| --- | --- |
| VA |  |
| HA |  |
| X int |  |
| Y int |  |
| Holes |  |
| Domain |  |
| Range |  |

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |

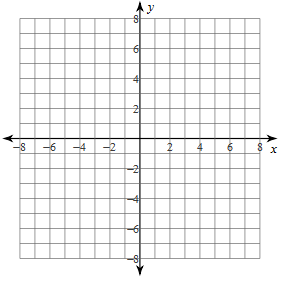
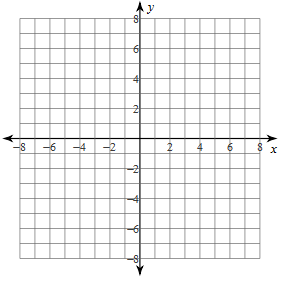
6. Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptotes, and domain and range of each. Then sketch the graph.

|  |  |
| --- | --- |
| VA |  |
| HA |  |
| X int |  |
| Y int |  |
| Holes |  |
| Domain |  |
| Range |  |

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |

7. Given the holes, vertical asymptotes, x-intercepts, and horizontal asymptote of each, find the equation.

|  |  |
| --- | --- |
| VA | X=-6 |
| HA | Y=1 |
| X int | X=-4 |
| Y int | Y=2/3 |
| Holes | X=2 |

8. Given the holes, vertical asymptotes, x-intercepts, and horizontal asymptote of each, find the equation.

|  |  |
| --- | --- |
| VA | X=3 |
| HA | none |
| Xint | Y=0 |
| Y int | Y=0 |
| Holes | X=-3 |