Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_HWK Finding Asymptotes, Holes, and Intercepts 9-12-17 Hour 1 2 3 4 5 6 7

1. Complete the related table for 

|  |  |  |  |
| --- | --- | --- | --- |
| Completely Factored Form (Simplify if possible) | | X intercept(s)  (if possible) | Y intercept  (if possible) |
| Vertical Asymptote  (if Possible) | Horizontal asymptote  (if Possible) | Slant Asymptote  (If Possible) | Hole  (If Possible) |

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Directions 1) Sketch a graph of the function on the grid labelling all of the information from the previous page

2) List at least four additional points that are NOT intercepts or holes

3) You must label the equations of all asymptotes (graph asymptotes with dotted lines)

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

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