**IM3H: Module 2 Rational Functions Review**

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| **Solve the following equations, state any extraneous solutions**  |
| 1.
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| 1.
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| **Identify the key features of each function. Graph each function** |
| 1.
 | holes:y-intercept:x-intercept(s):domain:vertical asymptotes:horizontal asymptotes:slant asymptotes: |
| Graph. |
| 1.

vertical asymptotes:horizontal asymptotes:slant asymptotes: | holes:y-intercept:x-intercept(s):domain: |
| Graph. |
| 1.

vertical asymptotes:horizontal asymptotes:slant asymptotes: | holes:y-intercept:x-intercept(s):domain: |
| Graph. |
| **Simplify each expression, and state restrictions.** |
| 1.
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| 1.
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| 1.
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| 1.
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| 1.
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| **Solve.**  |
| 1.
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| 1.
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| 1.
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| 1. Write a rational function with the following features.
* Domain:
* HA at
* This function has no real roots
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| 1. Write a rational function with the following features.
* (5, 27) is on the function
* HA at
* VA at
 |
| 1. Write a rational function with the following features.
* (12, 0) is on the function
* (0, 4) is on the function
* HA at
* VA at
 |
| 1. Write a rational function with the following features.
* Slant asymptote at y=4x+9
* VA at x=2
* (1,-2) is on the function
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