Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Formative Assessment Rational Function Parts, Graphs, & Behavior Period\_\_\_\_\_\_\_\_\_



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| --- | --- | --- | --- | --- | --- |
| Completely simplified function  (if simplification is possible) | X intercept(s)  State as a point | Y intercept  State as a point | Vertical Asymptote(s)  State as a line | Horizontal Asymptote  State as a line | Hole(s)  State as a point |
|  |  |  |  |  |  |

1. Shape, rectangle

   Description automatically generatedLabel the given graph with the points, holes, and asymptotes from the table above

Hole and Points need coordinates

Asymptotes need equations of lines

Show any necessary work here

|  |  |
| --- | --- |
| 1. State the domain of the rational function using two different methods   Method 1  Method 2 | 1. Complete the behavior statements with the appropriate value of y or +∞ or -∞   As x → -2- y →\_\_\_\_\_\_\_  (this asks as x approaches -2 from the left, what y value does the function approach?)  As x → 2+ y →\_\_\_\_\_\_\_  (this asks as x approaches 2 from the right, what y value does the function approach?)  As x → -∞ y →\_\_\_\_\_\_\_  (this asks “what is the left end behavior of the function?)  As x → ∞ y →\_\_\_\_\_\_\_  (this asks “what is the right end behavior of the function?) |



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| --- | --- | --- | --- | --- | --- |
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|  |  |  |  |  |  |

1. Label the given graph with the points, holes, and asymptotes from the table above

Hole and Points need coordinates

A picture containing lamp

Description automatically generatedAsymptotes need equations of lines

Show any necessary work here

|  |  |
| --- | --- |
| 1. State the domain of the rational function using two different methods   Method 1  Method 2 | 1. Complete the behavior statements with the appropriate value of y or +∞ or -∞   As x → -2- y →\_\_\_\_\_\_\_  (this asks as x approaches -2 from the left, what y value does the function approach?)  As x → 4+ y →\_\_\_\_\_\_\_  (this asks as x approaches 4 from the right, what y value does the function approach?)  As x → -∞ y →\_\_\_\_\_\_\_  (this asks “what is the left end behavior of the function?)  As x → ∞ y →\_\_\_\_\_\_\_  (this asks “what is the right end behavior of the function?) |



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|  |  |  |  |  |  |

1. Label the given graph with the points, holes, and asymptotes from the table above

Shape

Description automatically generatedHole and Points need coordinates

Asymptotes need equations of lines

Show any necessary work here

|  |  |
| --- | --- |
| 1. State the domain of the rational function using two different methods   Method 1  Method 2 | 1. Complete the behavior statements with the appropriate value of y or +∞ or -∞   As x → 1- y →\_\_\_\_\_\_\_  (this asks as x approaches 1 from the left, what y value does the function approach?)  As x → 0+ y →\_\_\_\_\_\_\_  (this asks as x approaches 0 from the right, what y value does the function approach?)  As x → -∞ y →\_\_\_\_\_\_\_  (this asks “what is the left end behavior of the function?)  As x → ∞ y →\_\_\_\_\_\_\_  (this asks “what is the right end behavior of the function?) |



|  |  |  |  |  |  |
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|  |  |  |  |  |  |

1. Label the given graph with the points, holes, and asymptotes from the table above

Shape

Description automatically generatedHole and Points need coordinates

Asymptotes need equations of lines

Show any necessary work here

|  |  |
| --- | --- |
| 1. State the domain of the rational function using two different methods   Method 1  Method 2 | 1. Complete the behavior statements with the appropriate value of y or +∞ or -∞   As x → 5- y →\_\_\_\_\_\_\_  (this asks as x approaches 1 from the left, what y value does the function approach?)  As x → 0+ y →\_\_\_\_\_\_\_  (this asks as x approaches 0 from the right, what y value does the function approach?)  As x → -∞ y →\_\_\_\_\_\_\_  (this asks “what is the left end behavior of the function?)  As x → ∞ y →\_\_\_\_\_\_\_  (this asks “what is the right end behavior of the function?) |