Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Review for Future Assessments Rational Function Parts 1 Period\_\_\_\_\_\_\_\_\_

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| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $f\left(x\right)=\frac{x^{2}+5x+4}{-2x^{3}+8x}=\frac{(x+1)(x+4)}{-2x(x+2)(x-2)}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → 1- y →\_\_\_\_\_\_As x → -2- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 2- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → 1+ y →\_\_\_\_\_\_As x → -2+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 2+ y →\_\_\_\_\_\_ |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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| State Domain of the Function using one method (On Formative Friday) | State Domain of the Function using a different method (on Formative Friday) |
| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $g\left(x\right)=\frac{x^{2}-4}{x^{3}+5x^{2}-14x}=\frac{(x+2)(x-2)}{x(x+7)(x-2)}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → -7- y →\_\_\_\_\_\_As x → -2- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 2- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → -7+ y →\_\_\_\_\_\_As x → -2+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 2+ y →\_\_\_\_\_\_  |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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| State Domain of the Function using one method (On Formative Friday) | State Domain of the Function using a different method (on Formative Friday) |

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| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $h\left(x\right)=\frac{x^{2}+1x-2}{-2x^{3}+8x}=\frac{(x+2)(x-1)}{-2x(x+2)(x-2)}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → 1- y →\_\_\_\_\_\_As x → -2- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 2- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → 1+ y →\_\_\_\_\_\_As x → -2+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 2+ y →\_\_\_\_\_\_  |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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| State Domain of the Function using one method (On Formative Friday) | State Domain of the Function using a different method (on Formative Friday) |
| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $j\left(x\right)=\frac{x^{2}-4x}{2x^{3}+10x^{2}}=\frac{x(x-4)}{2x^{2}(x+5)}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → 4- y →\_\_\_\_\_\_As x → -5- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 3- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → 4+ y →\_\_\_\_\_\_As x → -5+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 3+ y →\_\_\_\_\_\_  |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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| State Domain of the Function using one method (On Formative Friday) | State Domain of the Function using a different method (on Formative Friday) |

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| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $k\left(x\right)=\frac{5x-15}{2x+10}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → 5- y →\_\_\_\_\_\_As x → -5- y →\_\_\_\_\_\_As x → 3- y →\_\_\_\_\_\_As x → -3- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → 5+ y →\_\_\_\_\_\_As x → -5+ y →\_\_\_\_\_\_As x → 3+ y →\_\_\_\_\_\_ As x → -3+ y →\_\_\_\_\_\_  |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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| State Domain of the Function using one method (On Formative Friday) | State Domain of the Function using a different method (on Formative Friday) |

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| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $m\left(x\right)=\frac{2x^{3}-8x}{x^{2}+3x-10}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → -5- y →\_\_\_\_\_\_As x → -2- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 2- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → -5+ y →\_\_\_\_\_\_As x → -2+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 2+ y →\_\_\_\_\_\_  |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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| State Domain of the Function using one method (On Formative Friday) | State Domain of the Function using a different method (on Formative Friday) |

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| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $n\left(x\right)=\frac{-10x+5x^{2}}{4x^{2}+8x}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be on FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → -5- y →\_\_\_\_\_\_As x → -2- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 2- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → -5+ y →\_\_\_\_\_\_As x → -2+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 2+ y →\_\_\_\_\_\_  |
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| Only three forms of an answer will get you full creditthe statement of a point, the statement of a line, the word NONE(this is a section that you will be on SUMMATIVE assessment on Thursday)1. $p\left(x\right)=\frac{x^{2}-10x}{2x^{3}-20x^{2}}$

X intercept(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Y intercept \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Horizontal asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Vertical asymptote \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Does this rational function have a hole? \_\_\_\_\_\_\_If this rational function has a hole, then state it \_\_\_\_\_\_\_\_\_ | Only three forms of an answer will get you full creditA numerical value, +∞, or -∞(this is a section that you will be FORMATIVE assessment on FRIDAY)

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| Function Behavior from the LEFT of given x valuesAs x → -10- y →\_\_\_\_\_\_As x → 10- y →\_\_\_\_\_\_As x → 0- y →\_\_\_\_\_\_As x → 2- y →\_\_\_\_\_\_ | Function Behavior from the RIGHT of given x valuesAs x → -10+ y →\_\_\_\_\_\_As x → -10+ y →\_\_\_\_\_\_As x → 0+ y →\_\_\_\_\_\_ As x → 2+ y →\_\_\_\_\_\_  |
| END behavior of a function As x → -∞ y →\_\_\_\_\_\_ | END behavior of a functionAs x →+∞ y →\_\_\_\_\_\_ |

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