Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Summative Assessment Exponential Equations and Systems Period \_\_\_\_

SHOW ALL OF YOUR WORK IN A CLEAR AND EASY TO FOLLOW MANNER

Give an exact and approximate answer when necessary (attempt this problem WITHOUT the use of LOG)

1. $5∙2^{4x-3}-8=312$

|  |  |
| --- | --- |
| Graph of the related systemDiagram  Description automatically generated | Graph of the related system |
| 1. Show the ALGEBRA necessary to find point C
 |  |

1. Complete the related table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Point A | Point B | Point C | Point D | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate | ExactApproximate |  |

Give an exact and approximate answer when necessary (You will need the use of a logarithm for this problem)

1. $-2∙3^{-2x+1}-1=-17$

|  |  |
| --- | --- |
| Graph of the related system | Graph of the related system |
|  |  |

1. Complete the related table

|  |  |  |  |
| --- | --- | --- | --- |
| Point A | Point B | Point C | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate |  |

Extra Credit 1: Give an example of how you intend to keep your mind active over the summer

Give an exact and approximate answer when necessary (You will need the use of a logarithm for this problem)

1. $4∙10^{-x+1}=20$

|  |  |
| --- | --- |
| Graph of the related system |  |
|  |  |

1. Complete the related table

|  |  |  |  |
| --- | --- | --- | --- |
| Point A | Point B | Point C | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate |  |

Extra Credit #2: Which better describes your next step in mathematics and why? Exciting Scary

Give an exact and approximate answer when necessary (You will need the use of a logarithm for this problem)

1. $\frac{1}{2}∙e^{2x-6}+5=25$

|  |  |
| --- | --- |
| Graph of the related system |  |
|  |  |

1. Complete the related table

|  |  |  |  |
| --- | --- | --- | --- |
| Point A | Point B | Point C | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate |  |

Extra Credit #3 If you could thank only one teacher for what they have done for you this year, what would it be for?

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Summative Assessment Exponential Equations and Systems Period \_\_\_\_

SHOW ALL OF YOUR WORK IN A CLEAR AND EASY TO FOLLOW MANNER

Give an exact and approximate answer when necessary (attempt this problem WITHOUT the use of LOG)

1. $11∙3^{5x-2}-7=92$

|  |  |
| --- | --- |
| Graph of the related system | Graph of the related system |
| 1. Show the ALGEBRA necessary to find point C
 |  |

1. Complete the related table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Point A | Point B | Point C | Point D | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate | ExactApproximate |  |

Give an exact and approximate answer when necessary (You will need the use of a logarithm for this problem)

1. $-3∙4^{-5x+1}-2=-8$

|  |  |
| --- | --- |
| Graph of the related system | Graph of the related system |
|  |  |

1. Complete the related table

|  |  |  |  |
| --- | --- | --- | --- |
| Point A | Point B | Point C | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate |  |

Extra Credit 1: Give an example of how you intend to keep your mind active over the summer

Give an exact and approximate answer when necessary (You will need the use of a logarithm for this problem)

1. $5∙10^{-x+1}=75$

|  |  |
| --- | --- |
| Graph of the related system |  |
|  |  |

1. Complete the related table

|  |  |  |  |
| --- | --- | --- | --- |
| Point A | Point B | Point C | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate |  |

Extra Credit #2: Which better describes your next step in mathematics and why? Exciting Scary

Give an exact and approximate answer when necessary (You will need the use of a logarithm for this problem)

1. $\frac{-1}{3}∙e^{3x-6}-3=-6$

|  |  |
| --- | --- |
| Graph of the related system |  |
|  |  |

1. Complete the related table

|  |  |  |  |
| --- | --- | --- | --- |
| Point A | Point B | Point C | Horizontal Asymptote |
|  | ExactApproximate | ExactApproximate |  |

Extra Credit #3 If you could thank only one teacher for what they have done for you this year, what would it be for?