Int 3 MA C5 DDAY Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_\_ Group \_\_\_\_\_\_

NO CALCULATOR

1. Sketch. Label asymptotes and the locator point. Find the inverse and then sketch on the same axis.

|  |  |
| --- | --- |
| a. Equation of Inverse: | b. Equation of Inverse: |
| 1. Sketch. Find the asymptote, x-intercept and domain.
 |
|

|  |
| --- |
| Domain: |
| x-intercept: |
| Vertical asymptote: |

a.   |

|  |
| --- |
| Domain: |
| x-intercept: |
| Vertical asymptote: |

b.  |
| 1. Solve for x:
 |
| 1.

  | 1.
 | 1.
 |
| 1. Find the inverse algebraically. Show work.
 |
| 1.
 | 1.
 |
| 1. Draw a normal curve. Write what you’d enter into the calculator. DO NOT SOLVE.

|  |  |
| --- | --- |
| a. In the lovely town of Odenton, MD, the mean high temperature for the month of September is 78ºF with a standard deviation of 6°. Assuming that the temperature data is normally distributed, how many days in September would you expect the high temperature to be between 84° and 90º? | b. Mr. Templin promised that if we all score at least 50% on the test, we will pass. Sadly, the test was a killer, and he said the mean was 46% with a standard deviation of 4%. If the scores were normally distributed, what percentage of the class passed? |
| c. Math Club sells their famous chocolate chip cookies with a mean of 10.5 ounces and a standard deviation of 0.75. If the data is normally distributed, what percentage of the Math Club’s cookies are below 8 ounces? | d. My πpod has an average playtime of 9.5 hours with a standard deviation of 1.5 hours. What score would be the 40th percentile?  |

 |
| 1. Given
2. Find
3. Find
 | 1. Calculate the vertex of
 |
| 1. Solve the system algebraically
 | 1. Find the x-intercept of
 |
| 1. Solve
 | 1. Solve
 |