MATH 1113 PRACTICE TEST 1 FALL 2016

1. Find all asymptotes of 

2. Find the slant asymptote of the graph of 

3. In Question 1 determine what happens to the value of as 

4. Find the intercepts for 

5. Solve: . Write your answer in interval notation. To get credit you must draw an appropriate sign diagram.

6. Solve: . Write your answer in interval notation. To get credit you must draw an appropriate sign diagram.

7. Determine the accumulated balance if $40,000 is invested at an APR of 8.5% for 30 years compounded annually.

8. Determine the accumulated balance if $7,000 is invested at an APR of 5% for 7 years compounded continuously.

9. If *y* varies directly as *x*, and *y* = 12 when , find the value of *y* when .

10. 6. If *y* varies jointly as *u* and *t* = 12,  when  and , find the value of *y* when .

11. Light intensity varies inversely as the distance from the source. If the intensity of light 200 light years from a star is 2.8 lumens, what would be the intensity at a distance of 50 light years?

12. Write in exponential form: ln 7 = 1.9459….

13. Write in logarithmic form: 

14. Write in logarithmic form: 

15. Without using a calculator evaluate  for 

16. Use a calculator to evaluate . Round your answer to two decimal places.

17. Use a calculator to evaluate . Round your answer to four decimal places.

18. Use the properties of logarithms to rewrite  as sum, difference and/or constant multiple of logarithms.

19. Use the properties of logarithms to rewrite  as sum, difference and/or constant multiple of logarithms.

20. Condense to the logarithm of a single quantity