

Math 115, Section 068 - Extra Credit 2 Name: _____
Due: 9/28/18

Write legibly, show work and indicate your final answers. I am grading this based on effort. I can tell if you tried this 5 minutes before handing it in and you will not receive credit. Hand this in at the beginning of class on Wednesday (9/28/18)

1. Find all values of t in the interval $-0.5 \leq t \leq 1$ for which:

$$5 \sin(2\pi(t + \frac{1}{4})) + 3 = 0$$

Your answer should be found *algebraically*.

Solutions: _____

2. Consider the function

$$f(x) = \frac{2x(x^2 - 9)}{(x^2 - 5x + 6)(3x + 1)}$$

and find the zero(s), vertical intercept, vertical asymptote(s), horizontal asymptote, and hole(s).