## AMATH 353: Homework 3 Due April, 11 2018 ID: 1064712

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 ${f Part~1.})~~{
m With~some~slight~rearrangement~we~have:}$ 

$$u(x,t) = \frac{3}{1 + \cos^2(7(x - \frac{5}{7}t) + 2)}$$
 (1)

This is a traveling wave solution with  $c=\frac{5}{7}$  and f, suppose some f(z), as follows:

$$f(z) = \frac{3}{1 + \cos^2(7z + 2)} \tag{2}$$

Bla