# MATH 133 - Calculus with Fundamentals 1 

Quiz 2 - September 15, 2017

Your Name:

## Directions

Do all work on this sheet. There are 30 possible points.

1) (15) In the space below, plot the piece-wise defined function

$$
f(x)= \begin{cases}x+3 & \text { if }-1<x<1 \\ x^{2}-4 x+2 & \text { if } 1 \leq x<3\end{cases}
$$

Assume the domain is just the interval $(-1,3)$ indicated.


Figure 1: A sinusoidal function
2) (15) Find a formula for the sinusoidal function plotted in Figure 1 above.

