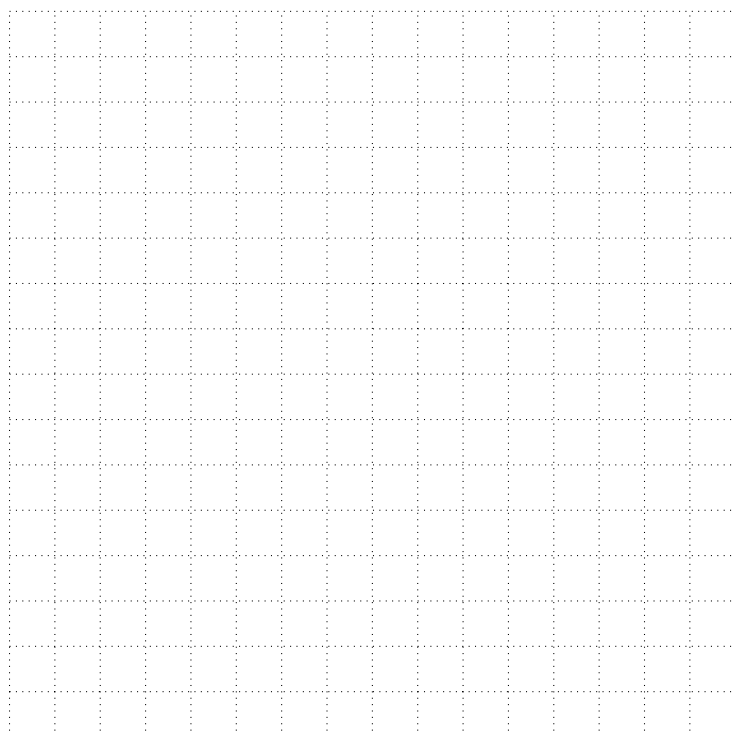# Quiz One

Show all your work

Name: _____

Number: _____

Signature: _____

Score: ___/5

**Problem 1**: Draw the following piece-wise defined function. Hint: $\sqrt{12} = 2\sqrt{3} \approx 3.464$

$$f(x) = \begin{cases} 3 - \dfrac{x}{2}, & x < 2 \\ (4-x)^2 + 2\sqrt{3}, & 2 \le x \le 4 \\ \sqrt{x^2 - 4}, & x > 4 \end{cases}$$