

Instructions: Write down all your work and do not erase anything, just cross out any unwanted work. You may also use the back of this page.

1. Find a function $f(x)$ and an x -value a such that

$$f'(a) = \lim_{h \rightarrow 0} \frac{\sqrt{h+2} - \sqrt{2}}{h}.$$

2. Are there more? How many?