Problem 1 *(3 points) What does it mean for a function f to be **continuous at a point** a? Hint: use limits!*

Problem 2 *(3 points) Is there some θ for which $\sin(\theta) + 2\cos(\theta) = 1.5$? Justify your answer. Hint: what theorem do you need to use?*

Problem 3 *(4 points) Suppose $f(x) = \pi x + e$. Compute $f'(7)$ using the definition of derivative.*