

Math 21A
Kouba
Worksheet 2

1.) Use the precise epsilon/delta definition of limit to prove the following statements. These are writing exercises like those done in class. You must be clear, concise, and organized.

a.) $\lim_{x \rightarrow 10} (3x + 5) = 35$

b.) $\lim_{x \rightarrow -3/2} (1 - 4x) = 7$

c.) $\lim_{x \rightarrow 1} (x^2 + 3) = 4$

d.) $\lim_{x \rightarrow -1} (x^2 + 3) = 4$

e.) $\lim_{x \rightarrow 3} \frac{2}{x + 3} = \frac{1}{3}$

f.) $\lim_{x \rightarrow -6} \frac{x + 4}{2 - x} = \frac{-1}{4}$

g.) $\lim_{x \rightarrow 9} (\sqrt{x} + 2) = 5$