

Exercise 1 Given that

$$\lim_{x \rightarrow 2} (5x - 7) = 3$$

illustrate the precise definition of a limit by finding values of δ that correspond to $\varepsilon = 0.1$, $\varepsilon = 0.05$, and $\varepsilon = 0.01$.

Exercise 2 Prove

$$\lim_{x \rightarrow -2} (3x + 5) = -1$$

using the ε , δ definition of a limit.