

*This quiz is worth 10 points and you have 10 minutes to complete it. Show all work and circle your final answers.*

**Calculators ARE allowed today.**

1. (3 pts) If  $f(x) = \begin{cases} x^2, & x < -1 \\ 2x + 1, & x \geq -1 \end{cases}$ , find the value of  $f(2)$ .

2. (7 pts) The table below shows the number of compact discs that Alina owned at the end of certain months last year.

Month	Jan.	April	June	July
CDs	51	60	66	69

(a) Explain why the data in the table above can be represented by a linear function. (Hint: What can you say about the average rate of change?)

(b) Construct a linear function to match the data. (Hint: Let January correspond to time  $t = 1$ , February to time  $t = 2$ , and so on.)