Unit 11 Quiz

Answer the following two questions. **Show your work (or explain your calculations)**.

Setup: We took a random sample of eleven Biology students and recorded the following values for the percentage grade on Test 1 and the percentage grade on the Midterm exam. The data is given below.

Grade on Test 1	Grade on Midterm Exam
78	83
75	75
53	48
65	72
81	85
74	75
74	69
77	80
71	48
39	23
94	92

a) **Conduct** a hypothesis test for the data above to determine if there is a significant positive correlation between grades on Test 1 and grades on the Midterm exam at a 5% level of significance (no need to look at a scatterplot).

b) **Determine** the linear regression equation.

c) Use your equation to **predict** the Midterm exam grade for a student who received an 85 on Test 1.