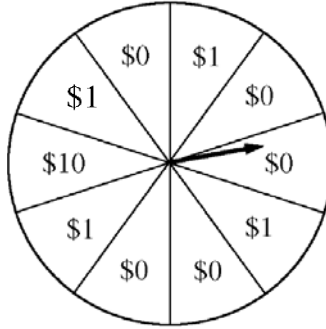Name: _____ Per: _____

A charity fundraiser has a Spin the Pointer game that uses a spinner like the one illustrated in the figure below.

A donation of $2 is required to play the game. For each $2 donation, a player spins the pointer once and receives the amount of money indicated in the sector where the pointer lands on the wheel. The spinner has an equal probability of landing in each of the 10 sectors.

a) Let X represent the net contribution to the charity when one person plays the game once. Complete the table for the probability distribution of X.

x	$2	$1	−$8
P(x)			

b) What is the expected value of the net contribution to the charity for one play of the game?

c) The charity would like to receive a net contribution of $500 from this game. What is the fewest number of times the game must be played for the expected value of the net contribution to be at least $500 ?