## Math 148 - Elementary Bio Stats

## Spring 2017 Homework 09

Chapter 16, pp 285-286, Review exercises 1,4,5,7,9,10
I know this next set has solutions in the back, but it's the only questions I could see that ask only about expected value.

Chapter 17, pg 290, Exc Set A, Questions 1,3
Review exercises Ch.16, p.285: Problems \# 1, 4, 5, 7, 9, 10
Exercise 1 for Ch.17.1:
A game of chance has the following odds:

| Win $\$ 1.50$ | $30 \%$ |
| ---: | ---: |
| Win $\$ 5.00$ | $20 \%$ |
| Lose $\$ 4.00$ | $40 \%$ |
| Lose $\$ 0.50$ | $10 \%$ |

a. Create a box model.
b. What is the expected value for the net gain after a single game?
c. What is it after 5 games?
d. What is it after 200 games?

## Exercise 2 for Ch.17.1:

Repeat exercise 1 for Ch.17.1 above for the following odds:

| Win $\$ 1.50$ | $30 \%$ |
| :--- | :--- |
| Win $\$ 5.00$ | $20 \%$ |
| Lose $\$ 4.00$ | $20 \%$ |
| Lose $\$ 0.50$ | $30 \%$ |

## All answers must be typed by computer.

You may do drawings by hand in case you choose to provide any. Use a ruler!

