

Math 206 - Quiz 3

February 14, 2018

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (1 point) Suppose the odds in favor of an event are 1 : 1. Is the event a certain event? Explain.

No, with 1:1 odds, the event has a prob of 50%. The event is just as likely to happen as not.

2. (2 points) The probability of the event A is 0.65.

- (a) What are the odds in favor of A ?

$$\frac{0.65}{0.35} = \frac{13}{7}$$

- (b) What are the odds against A ?

$$\frac{7}{13}$$

3. (2 points) In his 1964 fight against Sonny Liston, the odds against Cassius Clay (Muhammad Ali) were 8 to 1.

- (a) What were the odds in favor of Ali?

$$\frac{1}{8}$$

- (b) What was his probability of winning?

$$\frac{1}{9}$$