

Math 477 REAL QUIZ #5

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. (5 points) A coin whose probability of Heads is 0.6 is continually flipped until heads appears for the 5-th time. Let X denote the number of tosses. Compute the probability mass function of X .

2. (5 points) A company agrees to accept the highest of two sealed bids on property. The two bids are regarded as two independent random variables with common density function

$$f(x) = 5x^4 \quad , \quad 0 < x < 1 \quad .$$

What is the expected value of the accepted bid?