

MATH 3215: Quiz 3

February 7, 2012

We flip a biased coin, with $\Pr[\text{heads}] = \frac{1}{3}$, 3 times. Let A be the event that all three flips are heads or all three flips are tails. Let Y be the indicator random variable for A , i.e. $Y(x) = 1$ if $x \in A$, $Y(x) = 0$ if $x \notin A$. Let $F_Y(t)$ be the CDF for Y .

1. What is $F_Y(-2)$?
2. What is $F_Y(.5)$?
3. What is $F_Y(1.1)$?