

Homework 2

Due: September 17, 2019

Name:

1. (20 points) Fill out the truth table below for the logic function

p	q	$\neg q$	$p \wedge q$	$\overline{(p \wedge q)}$	$p \oplus \neg q$	$\overline{(p \wedge q)}$ $(p \oplus \neg q)$	\Rightarrow
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0	0						
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0	1						
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1	0						
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1	1						
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2. (5 points) How many possible sequences of heads and tails are there in k coin flips?

3. (10 points) How many ways are there to choose five balls from a set of ten balls?

4. (15 points) How many ways are there to order the numbers 1–5?