

Homework 2

CMPSC 360

Kinner Parikh
January 22, 2022

Question 1:

1. This is a statement because the truth value of the statement can be determined: Obama was the president during 2010 or not
2. This is a statement because the quantity $x + 3$ could be a positive integer or not, which means the truth value can be determined
3. This is a statement because 15 is either an odd number or it is not
- 4.

Question 2:

- a) If $1 + 1 = 3 \rightarrow F$, then dogs can fly $\rightarrow F \Rightarrow \underline{T}$
- b) If $1 + 1 = 2 \rightarrow T$, then dogs can fly $\rightarrow F \Rightarrow \underline{\overline{F}}$
- c) If $2 + 2 = 4 \rightarrow T$, then $1 + 2 = 3 \rightarrow T \Rightarrow \underline{T}$

Question 3:

- 1.