

## MATH 111, Assignment 2 Solutions

**Name:** Dillon Allen

**Date:** 09/01/2021

**Group Name:** Group 2 (TBA)

1. Determine whether or not the following are statements. In the case of a statement, say if it is true or false.

(a) Multiply  $2x + 2$  by 2.

Solution: This is not a statement, it is a command or step in solving some sort of equation. There is also ambiguity in what  $x$  is defined as, there is not enough context.

(b) Is  $3 \times 6 = 15$ ?

Solution: This is not a statement because it is a question.

(c) The integer 0 is neither even nor odd.

Solution: This is a statement, but is false because 0 is even. The definition of an even number is any number that can be written in the form  $x = 2n, n \in \mathbb{Z}$ . Since 0 is an integer, it will be the result of  $2 \times 0 = 0$ .

(d) If  $p(x)$  is a polynomial of degree 5, then  $p'(x)$  is a polynomial of degree 4.

Solution: Ask Oscar, but I believe this is not a statement because  $p'(x)$  is not explicitly defined as the derivative (See 2(g)).