

## 1 Introduction

Below are the answers to the handout. Please feel free to ask questions if anything is confusing.

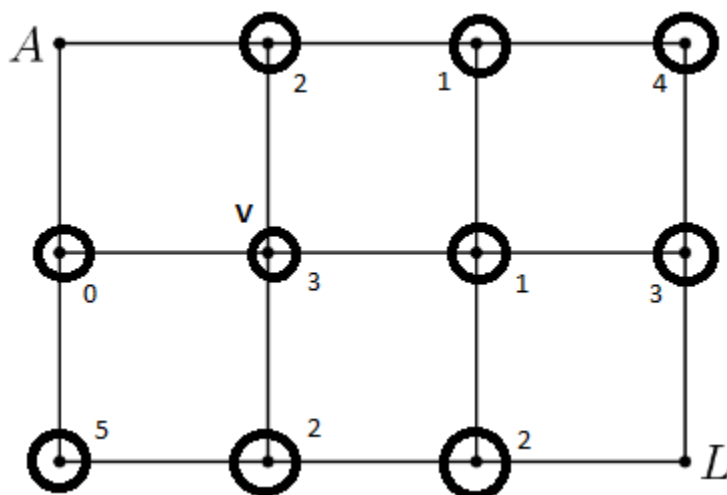
## 2 Warm-up: Numbers in Trick-or-Treating

- (a) 30  
(b) 30  
(c) 30
- You can ignore this problem due to the confusing wording.

## 3 Candy Piles

- 5
- 18
- 106
- 314

## 4 Trick-or-Treat Routing



- In our first scenario, you are in a rush to get home! What is the least amount of roads you have to walk on to get home?
  - Any path using only downward and rightward movement.
  - 10
  - 10
  - 4
- You are no longer in a rush. There are 17 roads, and you can not take any road twice (you can visit houses twice though.)
  - 13
  - 4

## 5 Halloween Brain Teasers

1. 13



2. pumpkin + ghost + (2 bats) = 14

3.  $\frac{5}{18}$

4.  $\frac{2}{206.5}$

## 6 More Spooky Season Problems



1. 9 items in total

2. 30 candies

3. The shorter side is 94 yards, and the longer side is 188 yards.

4. 390 candies

**Challenge:** 368 candies

**Super Challenge:** 3,510 candies