

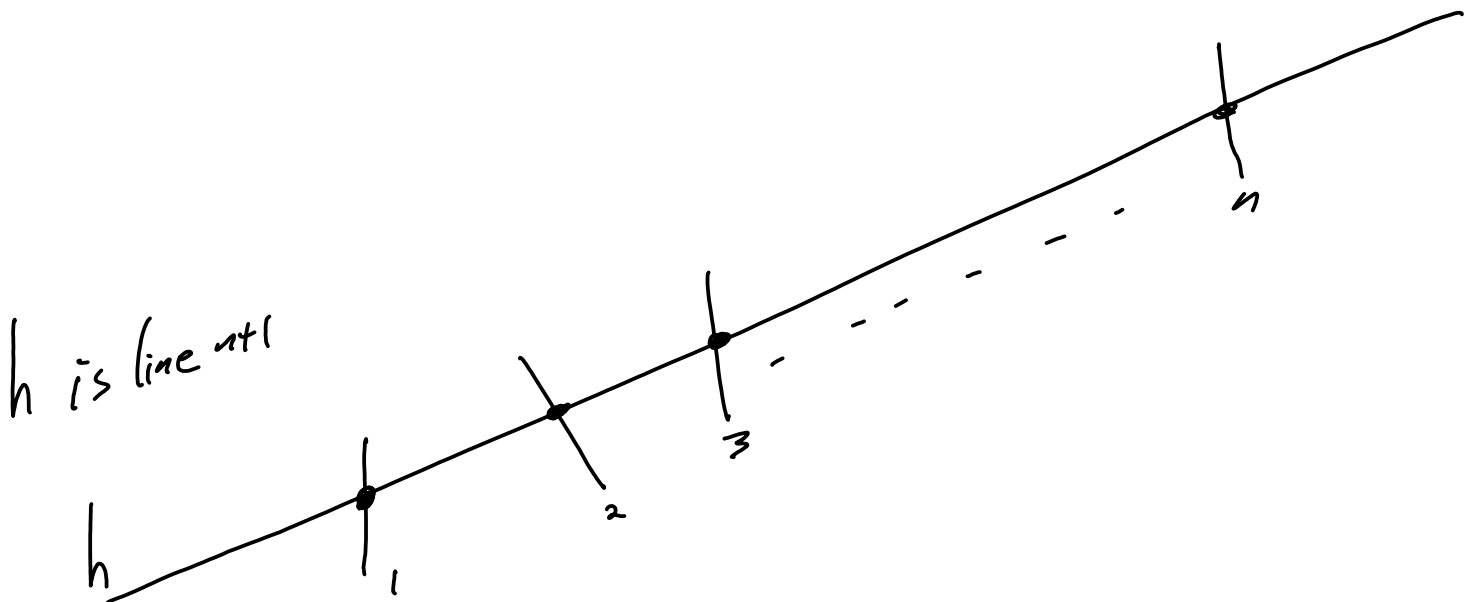
Assignment #4 due Friday 10/13 by 6 pm

Assignment #5 due Monday 10/23

Scan with
Adobe Scan
or
CamScanner
into one
PDF File
and upload
to Dropbox
on Pilot.

For Assignment 4

$n+1$ lines in general position



h intersects with the other n lines in n points.

This divides h into $n+1$ segments, 2 segments are infinite, $n-1$ segments are finite length.

Balanced sequences

length 2 +1, -1

length 4 +1, +1, -1, -1

 +1, -1, +1, -1

length 6

+ + + - - -

+ + - + - -

+ + - - + -

+ - + + - -

+ - + - + -

Partial sums

1, 2, 3, 2, 1, 0

1, 2, 1, 2, 1, 0

1, 2, 1, 0, 1, 0

1, 0, 1, 2, 1, 0

1, 0, 1, 0, 1, 0

↑
Final sum

All partial sums positive

1 2 3 2 1 0
+ + + - - -

1 2 1 0

Balanced

There is a zero partial sum

1 0 | 1 2 1 0
+ - | + + - -

1 0 1 2 1 0

Balanced

Balanced