when moved up
results in

when moved right
results in

a character position

when moved
down results in

Given x, a character position, consider the following. We know that x is a character position, which when moved up results in a character position, which when moved down results in a character position that we'll call P(x). We also know that x is a character position that we'll call Q(x). Fact: whenever x is a character position we will have P(x)=Q(x). **Summary: [up, down] = [ ]**

Given x, a character position, consider the following. We know that x is a character position, which when moved down results in a character position, which when moved up results in a character position that we'll call P(x). We also know that x is a character position that we'll call Q(x). Fact: whenever x is a character position we will have P(x)=Q(x). **Summary: [down, up] = [ ]**

Given x, a character position, consider the following. We know that x is a character position, which when moved up results in a character position, which when moved right results in a character position that we'll call P(x). We also know that x is a character position, which when moved right results in a character position, which when moved up results in a character position that we'll call Q(x). Fact: whenever x is a character position we will have P(x)=Q(x). **Summary: [up, right] = [right, up]**

Given x, a character position, consider the following. We know that x is a character position, which when moved down results in a character position, which when moved right results in a character position that we'll call P(x). We also know that x is a character position, which when moved right results in a character position, which when moved down results in a character position that we'll call Q(x). Fact: whenever x is a character position we will have P(x)=Q(x). **Summary: [down, right] = [right, down]**