**Test Case 1:**

* Initial speed: 20
* Acceleration: 1
* Deceleration: 1
* V Max: 30
* Intersection width: 40
* Yellow light time: 5
* Distance to intersection: 25

**Result:** We should probably stop

**Result with V Max:** We should probably stop

**Test Case 2:**

* Initial speed: 20
* Acceleration: 2
* Deceleration: 1
* V Max: 30
* Intersection width: 30
* Yellow light time: 5
* Distance to intersection: 20

**Result:** We can pass

**Result with V Max:** We should probably stop

**Test Case 3:**

* Initial speed: 26
* Acceleration: 2
* Deceleration: 1
* V Max: 30
* Intersection width: 25
* Yellow light time: 3
* Distance to intersection: 20

**Result:** It’s gonna be a terrible crash

**Result with V Max:** It’s gonna be a terrible crash

**Test Case 4:**

* Initial speed: 60
* Acceleration: 2
* Deceleration: 1
* V Max: 70
* Intersection width: 25
* Yellow light time: 3
* Distance to intersection: 20

**Result:** We can pass

**Result with V Max:** We can pass

**Test Case 5:**

* Initial speed: 60
* Acceleration: 2
* Deceleration: 1
* V Max: 70
* Intersection width: 25
* Yellow light time: 3
* Distance to intersection: 20

**Result:** It’s gonna be a terrible crash

**Result with V Max:** It’s gonna be a terrible crash

**Test Case 6:**

* Car1 Initial speed: 60
* Car1 Acceleration: 2
* Car1 Deceleration: 2
* Car1 V Max: 70
* Car2 Initial speed: 70
* Car2 Acceleration: 2
* Car2 Deceleration: 2
* Distance between the cars: 5
* Intersection width: 20
* Yellow light time: 5
* Distance to intersection: 20

**Result:** Both cars are gonna crash

**Test Case 7:**

* Car1 Initial speed: 26
* Car1 Acceleration: 2
* Car1 Deceleration: 1
* Car1 V Max: 30
* Car2 Initial speed: 70
* Car2 Acceleration: 2
* Car2 Deceleration: 2
* Distance between the cars: 5
* Intersection width: 20
* Yellow light time: 5
* Distance to intersection: 20

**Result:** Both cars can pass

**Test Case 8:**

* Car1 Initial speed: 26
* Car1 Acceleration: 2
* Car1 Deceleration: 1
* Car1 V Max: 30
* Car2 Initial speed: 30
* Car2 Acceleration: 1
* Car2 Deceleration: 2
* Distance between the cars: 5
* Intersection width: 20
* Yellow light time: 5
* Distance to intersection: 20

**Result:** Car1 passes, Car2 stops

**Test Case 9:**

* Car1 Initial speed: 26
* Car1 Acceleration: 2
* Car1 Deceleration: 1
* Car1 V Max: 30
* Car2 Initial speed: 30
* Car2 Acceleration: 1
* Car2 Deceleration: 1
* Distance between the cars: 5
* Intersection width: 20
* Yellow light time: 5
* Distance to intersection: 20

**Result:** Car1 passes, Car2 crashes