

Tests:

The following tests can be found in their respective folders. Each of those folders contains a .pdf file, which contains the expected output for each of the tests.

Damage:

These tests cover the damage feature both ways and cover power duration and permanency

Damage Test 1: Inner blocks can always be destroyed, but outer blocks can only be destroyed after getting a power.

Damage Test 2: Inner blocks can always be destroyed, but outer blocks can only be destroyed after getting a power and while it is active.

Damage Test 3: blocks can always be destroyed, until you get a power, then your damage is insufficient forever.

Damage Test 4: blocks can always be destroyed, until you get a power, then your damage is insufficient until the power ends.

Size:

These tests test the increasing and decreasing of size and if the sizes remain in their bounds properly.

Size Test 1: After gaining a power, size of the paddle and ball increase

Size Test 2: After gaining a power, size of the paddle and ball decrease

Size Test 3: Size of ball and paddle is already at the smallest, powers have an effect that decreases size, but they won't drop the size below the allowed minimum. Size of the block is increased by the effect, but the block is already at its max size so it won't become larger.

Size Test 4: Size of ball and paddle is already at the greatest, powers have an effect that increases size, but they won't increase the size above the allowed maximum. Size of the block is decreased.

Resistance:

Resistance Test 1: After gaining a power, the outer blocks can be destroyed.

Resistance Test 2: After gaining a power, blocks will have increased resistance and take no damage from the ball.

Hardness:

Hardness Test 1: After gaining a power, the hardness of all blocks is increased by 1, so you require 2 hits to kill a block. After the effect ends any blocks that were hit once will now die.

Hardness Test 2: All blocks die after gaining a power.

Hardness Test 3: The outer blocks are invulnerable, but if you gain a power then they die instantly.

Immaterial:

Immaterial Test 1: There are two powers, one turns immaterial on and the other turns it off. If you first grab the off power and then the on power then immaterial will remain off until the off power has expired, then it will turn on. And the other way around if you first grab an on power and then the off power.

Speed:

Speed Test 1: After gaining a power, speed of the paddle and ball increase

Speed Test 2: After gaining a power, speed of the paddle and ball decrease

Speed Test 3: Speed of ball is already at the smallest, powers have an effect that decreases speed, but they won't drop the speed below the allowed minimum. Paddle is set to the minimum speed by the effect, even though the effect would drop it way into the negatives.

Speed Test 4: Speed of ball is already at its greatest, powers have an effect that increases speed, but they won't increase the speed above the allowed maximum. Paddle is set to the maximum speed by the effect, even though the effect would drop it way into the negatives.

Orientation:

Orientation test 1: After getting a power the ball's direction is temporarily changed, after 3 seconds it suddenly changes back again.

Collision Effect tests:

These effects work just like normal effects, so we only have to test if one type works. For this we will go with size. Three objects can be involved in a collision, either it's a collision between ball and paddle or ball and block.

Collision test 1: After gaining a power, when a ball collides with the paddle, the ball will increase in size.

Collision test 2: After gaining a power, when a specific ball collides with the paddle, the ball will increase in size.

Collision test 3: After gaining a power, when a specific ball collides with a specific block, the block will decrease in size.

Collision test 4: After gaining a power, when a ball collides with a block, the ball will increase in size.

Collision test 5: After gaining a power, when a ball collides with a paddle, the paddle will increase in size for the next second.