**Get Out, Control Layer (Jaymes Bunce and Sam Prettyman)**

**(Jaymes Bunce and Sam Prettyman) Door #2 Sand Weight:**

Define the problem

· Pounds = Liters \* 2.2

Input:

· Player Guess of liters

· Pounds

Output:

· Correct number of liters needed to complete the problem.

Rule:

· Liters cannot be negative

· Pounds cannot be negative

· Amount of total pounds hint must be between 1-15.

+calcWeight(playerGuess, pounds): double

Begin

Pounds = a randomNumber < 40 and > 0.1

IF pounds < 1 or IF pounds > 40

Return -4

IF liters < 0 Then

Return -1

IF liters > 15 Then

Return -2

playerGuess = liters \* 2.2

IF pounds == playerGuess Then

Return 1

Else

Return -3

END

**(Jaymes Bunce) Door #3 Pin Code:**

Define the problem

* x=y/2 + 32 x^2=????

Input:

* Y
* pinGuess

Output:

* Code or Solution to the problem (X)

Rule:

* Must be between 0 >= y =<134
* Y must be an even number

+calcPinCode(y): double

Begin

IF y < 0 Then

Return < -1

IF y > 134 Then

Return -2

IF y is even # Then

Return -3

X= Y/2 +32

code= X^2

IF code = pinGuess Then

Return 1

Else

Return -4

End

**Door #4 Calculate Force of kick or swing: (Sam Prettyman)**

Define the problem:

* Force = mass \* acceleration
* F = m(a)

**Inputs**

Acceleration (a)

Mass (m)

**Outputs**

Force(f)

**Rules**

Mass >0

Acceleration >0

Force > 450 and Force <=650

+calcForce(mass, acceleration): double

BEGIN

IF mass < = 0 THEN

return -1

IF acceleration < = 0 then

return -2

force = mass \* acceleration

IF force >= 450 AND force <=650 THEN

return force

ELSE

return 0

END