

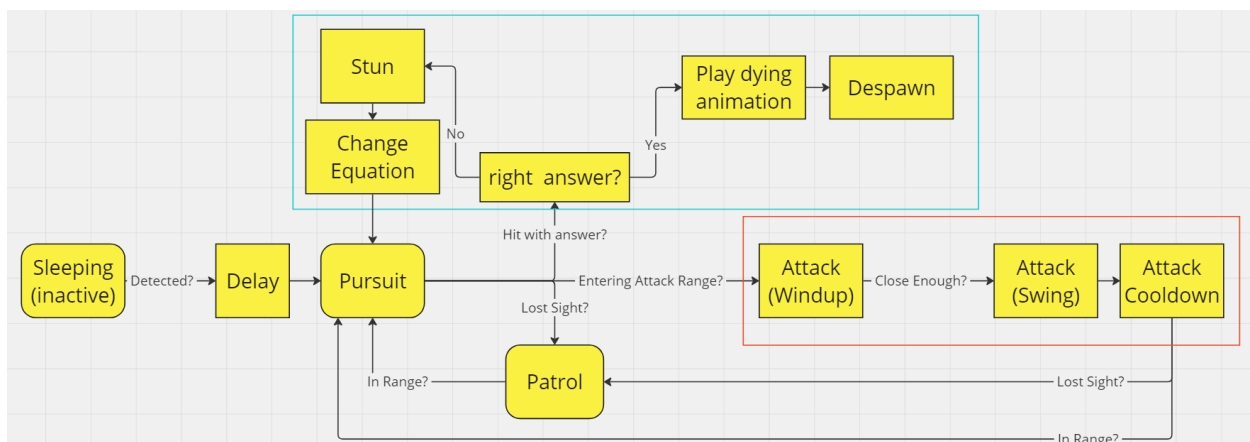
Goal: Ways for an individual PEMDAS alongside a group of PEMDAS to interact with the player.
WITH GOAL OF MAKING SOLVING EASIER

General Behavior States

- 1. Sleeping (inactive)** - Pemdass is inactive and immobile until the player gets close enough to make them active.
 - **Visual:** [Halo: Infinite](#) (eepy grunts)
 - Pemdass snore to give information to player
 - When woken up Pemdass makes a bark then begins pursuit
 - **Escalations:** PEMDAS can be “blinked in” when an alarm is tripped, making players more aware of their pathing
 - **Components:**
 - Agro radius
 - Sound of waking up
 - **Additional Details:**
 - Pemdass snore to give information to player
 - When woken up, Pemdass barks, then begins pursuit
- 2. Pursuit** - When a player gets close to an active Pemdass, after a short delay and identifiable sound, Pemdass will move toward Player
 - **Components:**
 - Move Speed
 - Detection Radius
 - Detection Sound (played only from patrol status)
 - **Additional Details:**
 - The Pemdass periodically make a noise that tells its in pursuit
- 3. Stun** - When an incorrect number is shot at a Pemdass, they are stunned for a short time. Displaying what the correct answer is, when recovered a new equation is shown and returns to pursuit
 - **Visual:** [Donald Duck](#)
 - **Components:**
 - Stun time
 - **Additional Details:**
 - When stunned by incorrect answer, Pemdass stops in its tracks
 - Jumps a little to tell it's been hit and sits on its butt
 - Stars (or mathematical signs) swirl around its head
 - A sound plays when Pemdass recovers and equation reset

4. **Attack** - When Pemdass is in attack range of the player, the Pemdass continues to move forward while winding up a swing to deal damage. When close enough Pemdass stops and after a short delay swings in the direction of player. Giving player a small window to backstep to dodge. When Pemdass attacks they have another delay (reset) to allow players to create space.
 - **Visual:** [Ultra Kill](#) (Dodgeable attacks)
 - **Components:**
 - Wind up range
 - Attack range
 - Attack delay
 - Reset Timer
 - **Note**
 - This design might create unintended player behavior. Players would immediately begin running away from enemies to allow for more time to solve. Something taken further by needing to sidestep Pemdass attacks.
 - Perhaps having a ranged unit would lessen this “[training](#)” behavior
 - **Additional Details:**
 - The windup needs to be something that is easily seen (and windup for a bunch, a faint glow for a taser shock attack)

5. **Patrol** - When not asleep or pursuing, Pemdass enter a wander/patrol state where they move around the area
 - **Note**
 - This is pretty much a way to make the Pemdass seem more active and dynamic
 - **Additional Details:**
 - Pemdass muster to themselves, try to gather with 1-2 others
 - Possibly able to connect with other Pemdass



Unique Behavior States

6. **Connected Pemd**as - Pemdas are grouped together in ascending order, making the player quickly fire ascending numbers
7. **Ranged Pemd**as - These special enemies have simplified equations to allow for easy dispatching. Being placed in higher positions, making player look up.
 - **Components:**
 - Agro range
 - Projectile Speed
 - Shot Delay
 - **Note**
 - Being able to read the equation on the Pemdas would be challenging at range.
 - Perhaps needing to pay attention to the projectile that is shot is the answer.
 - I.E. Pemdas shoots a 5 -> you need to fire a 5 back at it
 - Having a 3-round burst needing to pay attention to the projectiles that create an equation
 - I.E. Pemdas shoots "5" "+" "4" creating the equation "5 + 4" the answer to the Pemdas being 9
8. **Solve for X** - some pemdas have a missing term that the player needs to figure out and shoot for the correct answer
 - **Visual:** $x + 3 = 5$ (answer is 2)