

The Dragon's Cure

Narrator: Once upon a time, there was a famous Mathemagic Academy. Alice and Bunny were two young students there. From time to time, they helped the local villagers with various troubles.

Act I

(Villagers run in.)

Villager 1: Alice! Bunny! The White Dragon is sick! She says she has **twelve heads!**

Alice: Twelve heads? That sounds like the **multiplicity virus!** We must find a cure.

Villager 2: Yes! She refuses to eat because **she doesn't know which mouth to use!**

Bunny: We must hurry. Otherwise, it will spread. Let's go see Potion Girl.

Act II

(Potion Girl stands by a cabinet.)

Potion Girl: The cure is here, but first you must solve my riddle:
"Add 2, 4, and 6, then double it. What's the answer?"

Alice: $2 + 4 + 6 = 12$. Double is 24!

Potion Girl: Correct! How can I help you?

Bunny: The White Dragon got sick. She thinks she got 12 heads! Sounds like the multiplicity virus.

Potion Girl: I see. I suggest **the red potion to divide the multiplicity by 2**, and **the green potion to add the multiplicity by 1**. Use them wisely.

Alice (pointing): Wait—what's that black potion on the shelf? I never saw it in the potion guide.

Potion Girl: Ah, that one is an empty bottle of the forbidden potion. My master once said it was the **Divide-by-Zero potion** and **often makes things explode**. Best not touch it.

Bunny: Let's hurry!

Act III

(They return to the Dragon, who looks weak.)

Dragon (groans): Yesterday I counted... one, two, three... all the way to twelve! How many heads did I have?

Alice: Don't worry, Dragon. Try the red potion.

(Dragon mimes drinking. Counts heads.)

Bunny: How many heads do you have?

Dragon: One, two, three... six heads!

Alice: So take the red potion again!

Dragon: One, two, three... three heads!

Bunny: **We cannot use the red potion again. 3 is odd and cannot be divided by 2.**

Alice: Now take the green potion.

(Dragon takes a sip of the green potion.)

Bunny: How many heads do you have now?

Dragon: Four heads.

Alice: Take the red again... and once more!

Dragon (smiling): One head! I'm normal! How come you find the cure so quickly?

All: Because we are mathemagicians!

(Bow. End.)

