

Slay the Dragon:

Show your work!

A dragon has 3 heads and 3 tails. A magic sword makes different types of cuts, all of which result in some form of regrowth.

Cut off:


1 head
1 tail
2 heads
2 tails



Result:



regrows 1 head
regrows 2 tails
regrows nothing
regrows 1 head

What is the minimum (smallest) number of cuts needed to slay the dragon?

* To slay the dragon, you must cut off all its heads and all its tails.

1. cut 1 tail =  2. cut 1 tail = 

3. cut 1 tail =  4. cut 2 tails = 

5. cut 2 tails =  6. cut 2 tails = 

7. cut 2 heads =  8. cut 2 heads = 

9. cut 2 heads =  ✓