

Quiz 7: Version A

USE YOUR CUBE!

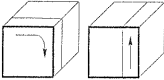
All MOVES are viewed from the FRONT.

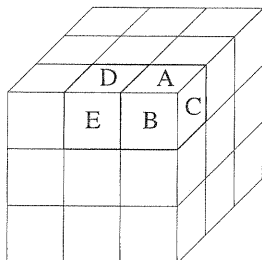
1. (6 pts) Rubik's Cube has 6 center cubies, 12 edge cubies, and 8 corner cubies.

2. (4 pts) Circle the correct answer for each of the following.

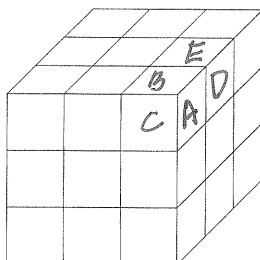
(a) Is it possible to move an edge cubie into a corner position? YES NO

(b) Is it possible to move a center cubie into a corner position? YES NO

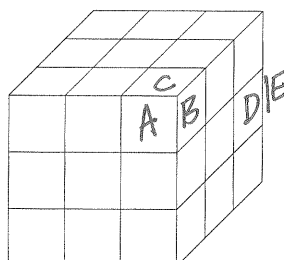
3. (7 pts) Let $Z =$ . We wish to trace the movement of the corner cubie labeled ABC and the edge cubie labeled DE after successive applications of Z . Label the new position and orientation of the two cubies with $A, B, C, D,$ and E (if visible on the upper, front, or right faces pictured).



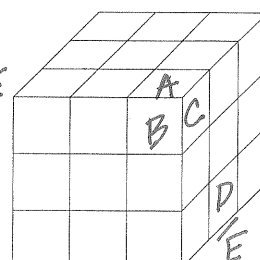
Original



After Z



After Z^2



After Z^3

4. (3 pts) Now solve the upper (white) face of your cube and show it to me when you turn in your quiz. (Make sure I mark your score for this problem on your quiz before you leave.) Bonus points for solving the whole upper layer!