Hint for Problem 67

What usually makes it hard for students to start this problem is the fact that we just defined what $R(4, 4)$ *is*, and not what it means for a number *not* to be $R(4, 4)$. So to get started, try to write down what it means to say $R(4, 4)$ is not 8. You will see that there are two things that can keep $R(4, 4)$ from being 8. You need to figure out which one happens and explain why. One such explanation could involve the graph K_8.