Erin has written three tests for her math class. She calculates the average of her marks on the first two tests. This average is then averaged with her third test mark to get 80%. She then calculates the average of her marks on the last two tests. This average is then averaged with her first test mark to get 83.5%. Finally, she calculates the average of her marks on the first and third tests. This average is then averaged with her second test mark to get 84.5%.

Her fourth test is coming up and after writing this test she wants her overall average for the four tests to be exactly 86%. If all four tests are out of 100 marks, what mark does Erin need to get on her fourth test in order for her overall average to be exactly 86%?