Concept Question 7-7: Why are all MA systems BIBO stable?

"Bounded input" means $|x[n]| < B$ for some B and all n. Then the MA system

$$y[n] = b_0 \, x[n] + b_1 \, x[n-1] + b_2 \, x[n-2] + \cdots + b_M \, x[n-M]$$

is a linear combination of bounded functions, so $y[n]$ is bounded. Hence, any bounded input results in a bounded output.