

Question #132

Answer: B

Comparing B & D: Prospectively at time 2, they have the same future benefits. At issue, B has the lower benefit premium. Thus, by formula 7.2.2, B has the higher reserve.

Comparing A to B: use formula 7.3.5. At issue, B has the higher benefit premium. Until time 2, they have had the same benefits, so B has the higher reserve.

Comparing B to C: Visualize a graph C^* that matches graph B on one side of $t=2$ and matches graph C on the other side. By using the logic of the two preceding paragraphs, C's reserve is lower than C^* 's which is lower than B's.

Comparing B to E: Reserves on E are constant at 0.