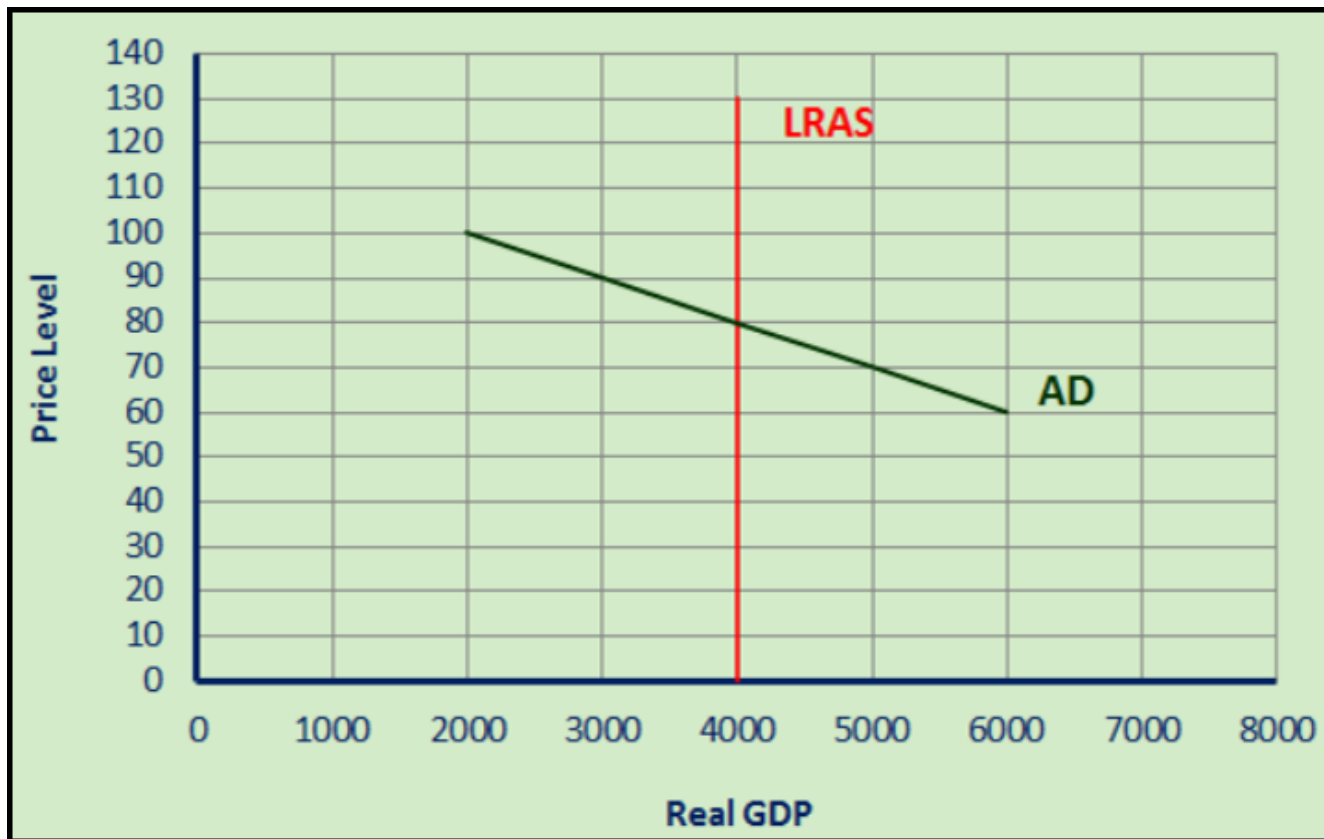**Problem 1.** The marginal propensity to consume is 0.75. Suppose that all else the same, the Fed increases the money supply by 25%. What will be the long long-run equilibrium and real GDP?

Answer 1. When the Fed increases the money supply by 25%, we assume that the price level will increase by 25% at every level of real GDP. (This logic will hold symmetrically for decreases in the money supply and for any percentage change.)

For instance, the point (2000, 100) will change to (2000, 125). The point (6000, 60) will change to (6000, 75). And so forth. The long-run price level is now 100, output is still at 4000.
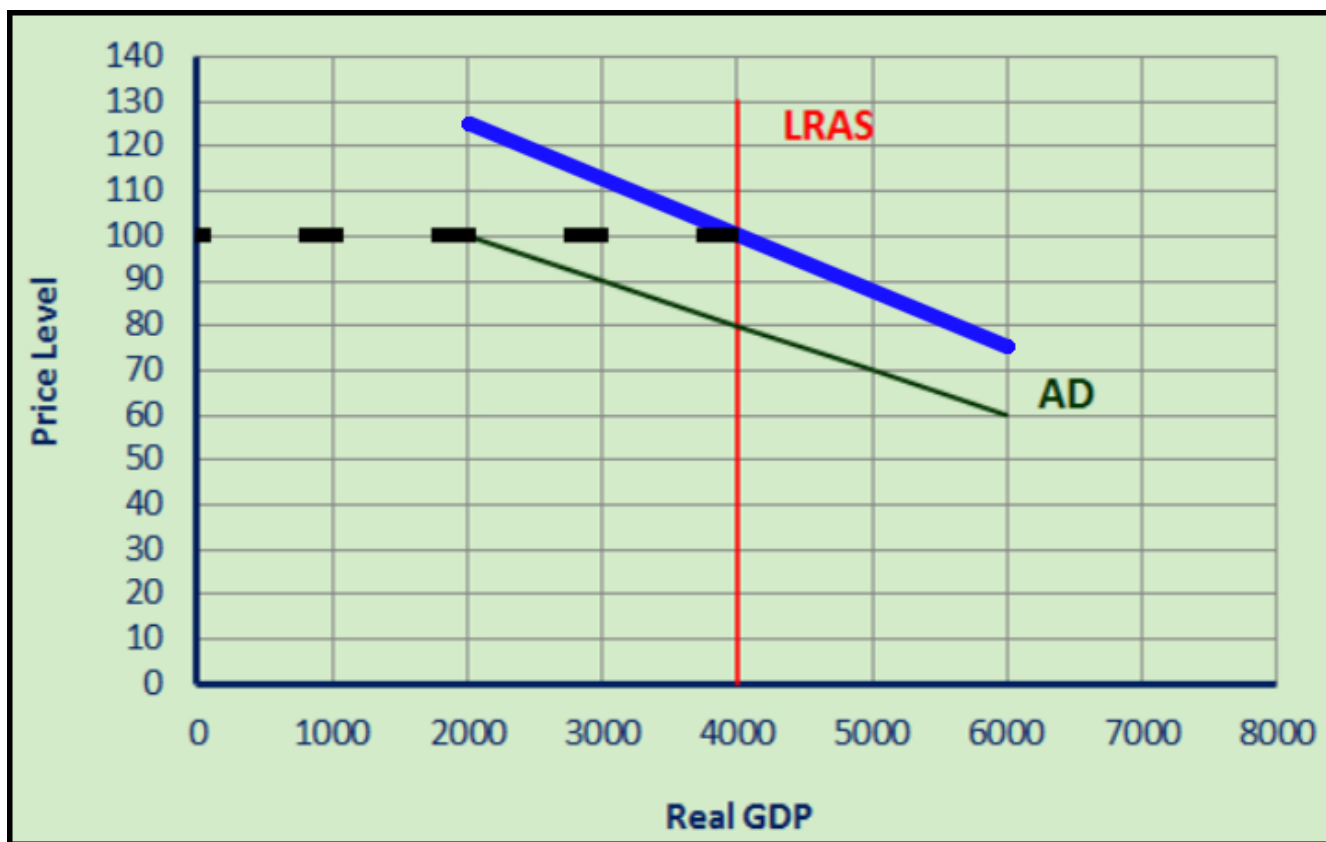
Problem 2. Currently the aggregate demand function is AD0. If, all else the same, the Fed increases the supply of money by 100%, the aggregate demand function will shift to which?
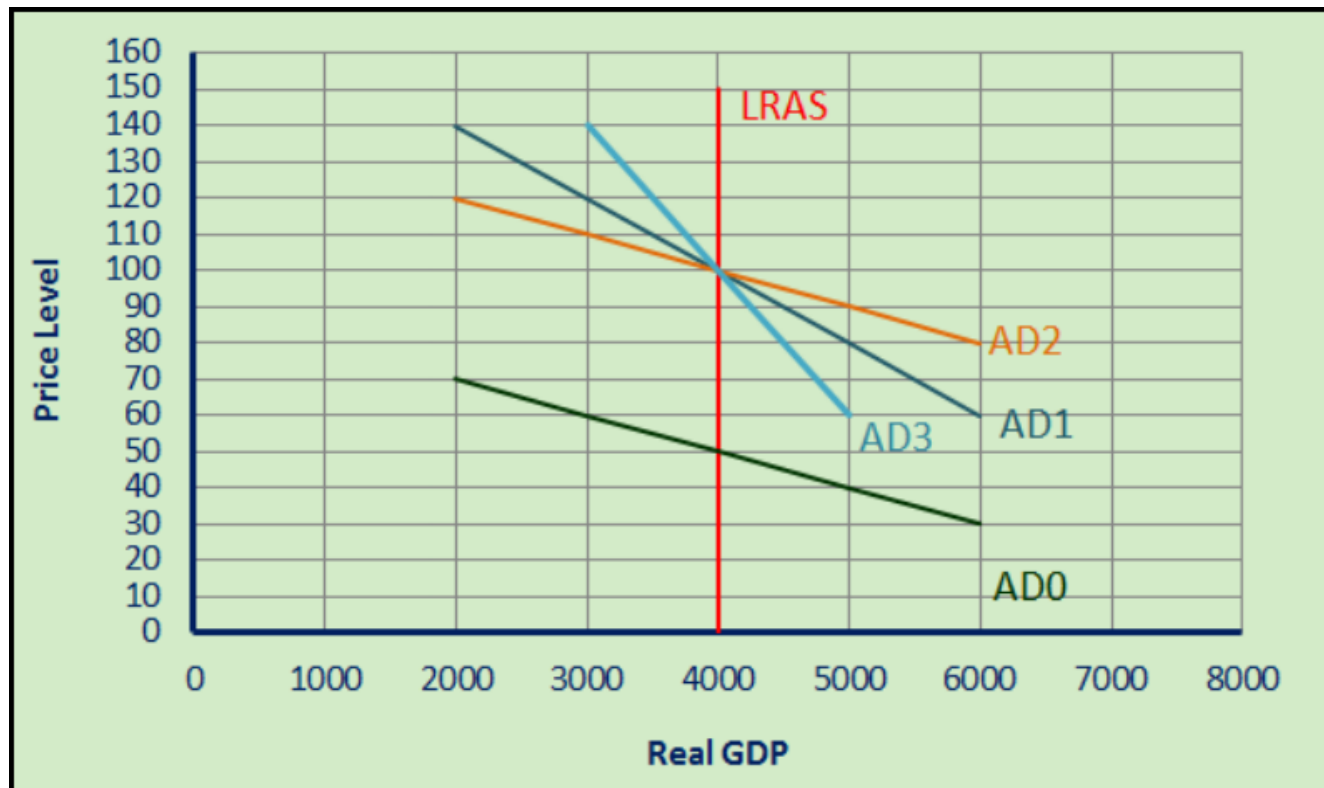

Answer 2. Same logic as before. The point (2000, 70) turns into (2000, 140); the point (6000, 30) turns into (6000, 60). This aligns with AD1.

Problem 3.   Currently, $Y = 50$, $Y_p = 50$, and $P = 100$. The expenditure multiplier is 4. All else the same, the Fed reduces the money supply by 20%. Then, which of the following would be the most plausible path followed by the economy?

(a) short run: $Y = 40$, $P = 90$ long run: $Y = 50$, $P = 80$

(b) short run: $Y = 30$, $P = 100$ long run: $Y = 50$, $P = 60$

(c) short run: $Y = 10$, $P = 90$ long run: $Y = 50$, $P = 80$

(d) short run: $Y = 30$, $P = 80$ long run: $Y = 50$, $P = 80$
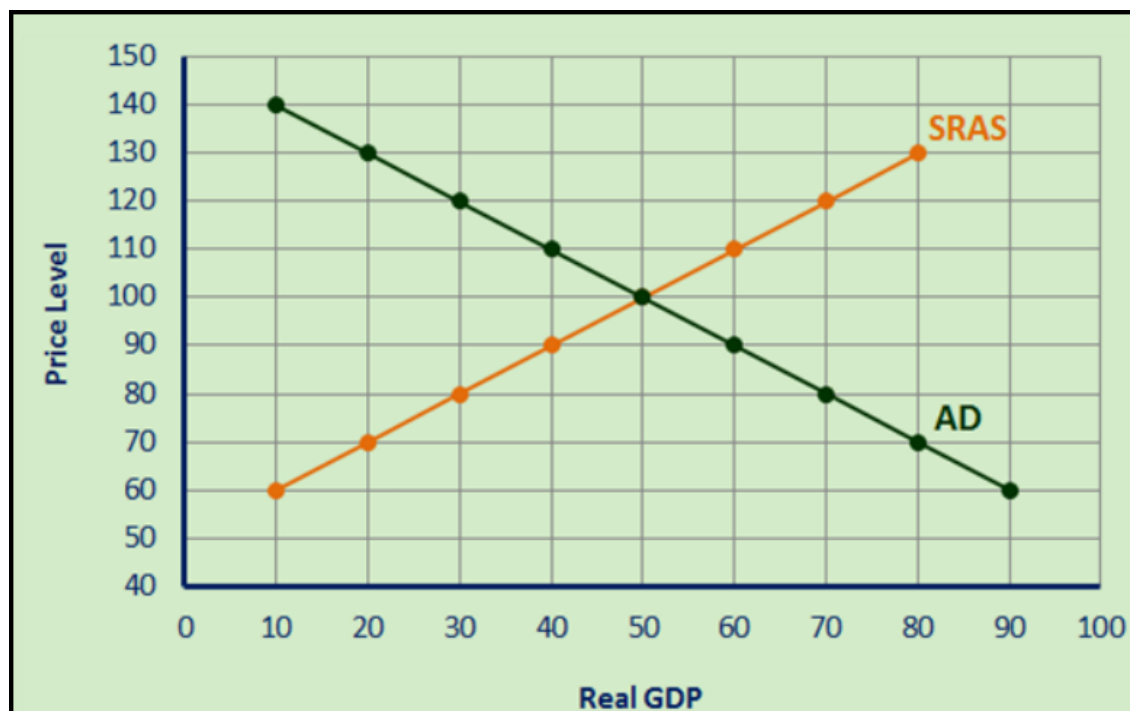
Answer 3: a. Hey guess what, same logic as before. The point (10, 140) turns into (10, 112), the point (90, 60) turns into (90, 48). The new graph is
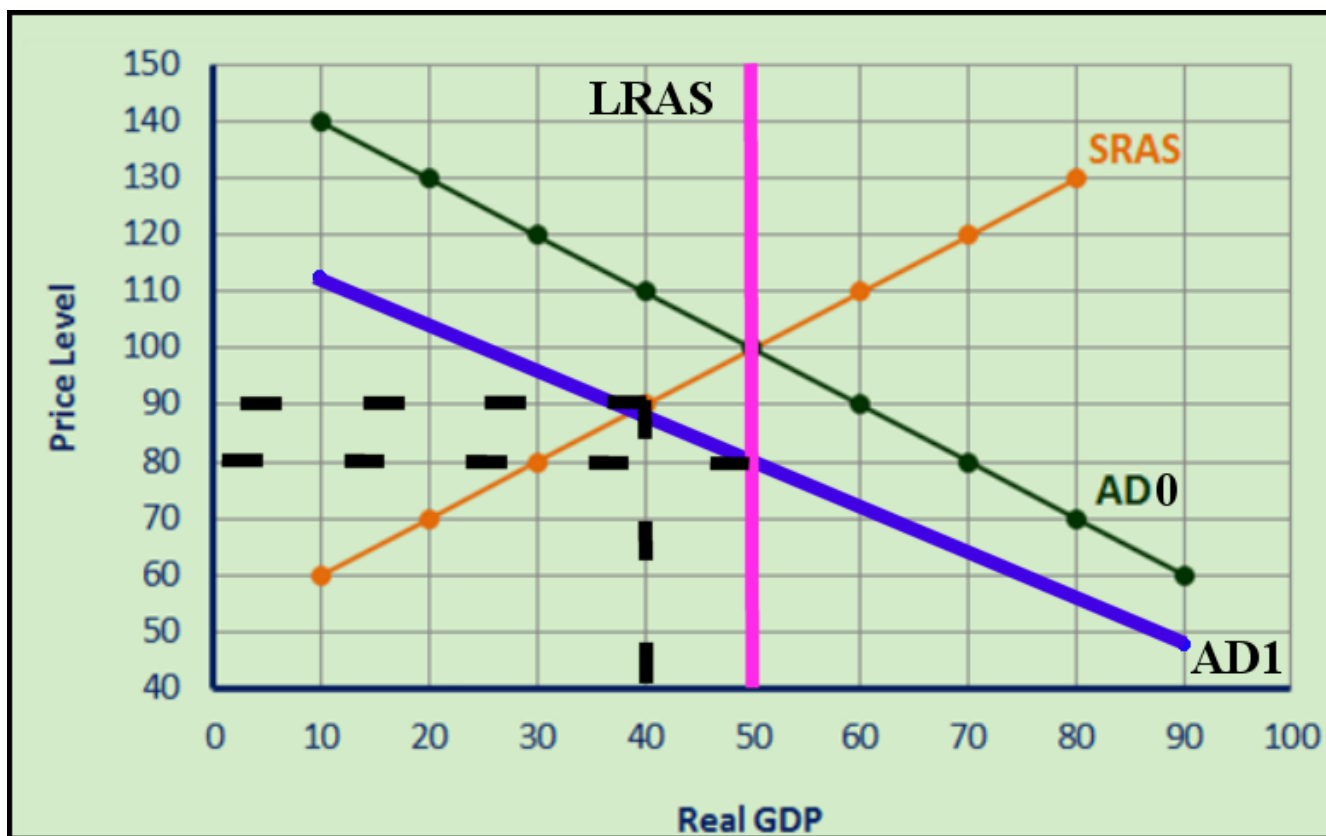
Yeah, it doesn't *quite* line up with (40, 90), but it's really close and therefore the most "plausible" path for the short run. In the long run, the equilibrium is at (50, 80).