

## Radioactive Decay Problems

1. How many half lives occurred if the mass before is 32g and the mass afterwards is 1g?	A. 7 B. 6 C. 5 D. 4
2. What was the mass before nuclear decay if two half lives occurred and the mass after nuclear decay was 8g?	A. 56g B. 32g C. 14g D. 28g
3. Find the mass after nuclear decay if three half lives occurred when the mass was 9.4 kg.	A. 14.5kg B. 94.7kg C. 36.8kg D. 1.175kg
4. If the mass was 20g before nuclear decay and eight half lives occurred, what was the mass after?	A. 0.08g B. 0.9kg C. 8.0kg D. 96g
5. What was the mass before decay started if twelve half lives occurred and the mass after was 1g?	A. 467g B. 4096g C. 325g D. 128g
6. When the mass before and after were 0.8kg and 0.05 kg, respectively, how many half lives occurred?	A. 4 B. 5 C. 4.5 D. 6
7. What number of half lives occurred when the mass before decay was 8g and the mass after was 2g?	A. 3 B. 6 C. 2 D. 8
8. How much mass was left after three half lives if mass before decay is 1024g?	A. 600g B. 121g C. 135g D. 128g
9. If the mass before decay is 36kg and the mass after decay is 9kg, how many times did the mass decay in half?	A. 0 B. 1 C. 2 D. 0.5
10. If mass after is unknown, what will its value be when two half lives occur, and the mass before the decay was 24g?	A. 32g B. 6g C. 94g D. 3g