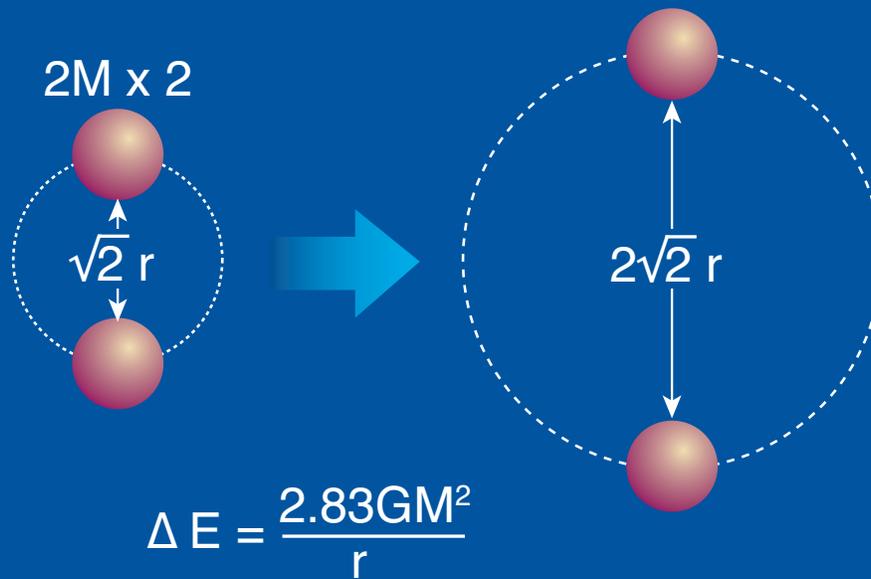


A



B

Figure 3. In both A and B, density and expansion are identical, but the energy required to accomplish the expansion in A is greater than that required in B. “A” is a sketch of the universe at an earlier time, when the distribution of matter was smoother; B represents a later, clumpier time. As matter clumps to form stars and galaxies, the same degree of expansion equates to a smaller gain in potential energy.