4. . A scattering experiment is done with a 32 kg disc and two 8 kg discs on a frictionless surface. In the initial state of the experiment, the heavier disc moves in the x direction with velocity v = 25 m/s toward the lighter discs, which are at rest. The discs collide elastically. In the final state, the heavy disc is at rest and the two smaller discs scatter outward with the same speed. What is the xcomponent of the velocity of each of the 8 kg discs in the final state?  (A) 12.5 m/s (B) 16 m/s (C) 25 m/s (D) 50 m/s (E) 100 m/s