

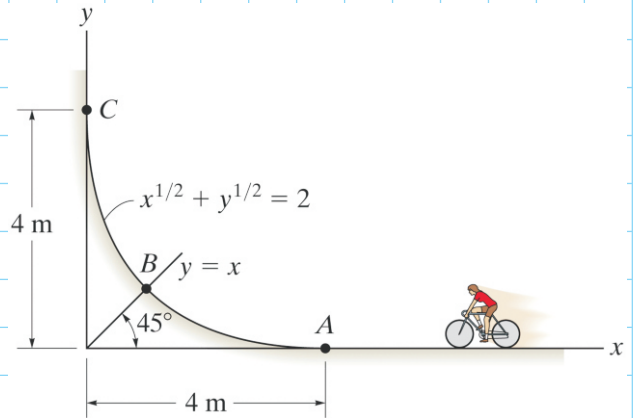


NAME

DATE

PROBLEM: AP-16**GIVEN:**

The cyclist travels to point A , pedaling until he reaches a speed $v_A = 4 \text{ m/s}$. He then coasts freely up the curved surface. Determine how high he reaches up the surface before he comes to a stop. Also, what are the resultant normal force on the surface at this point and his acceleration? The total mass of the bike and man is 75 kg . Neglect friction, the mass of the wheels, and the size of the bicycle.

**REQUIRED:****SOLUTION:**