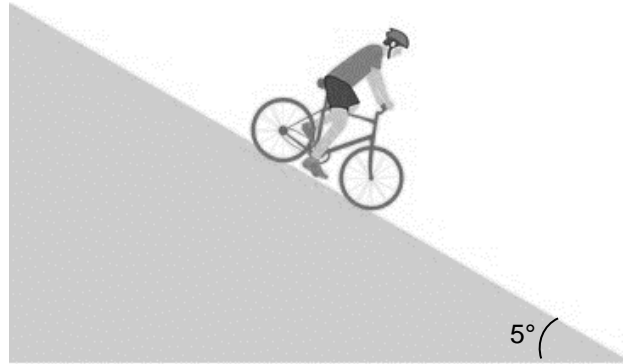


- 3** In the presence of air resistance, a cyclist and his bicycle of total mass 80.0 kg is able to coast down a smooth slope at a constant speed of 1.4 m s^{-1} as shown below.



The air resistance is directly proportional to the cyclist's speed.

What is the additional force that the cyclist must apply in order to descend the same slope at a steady speed of 5.5 m s^{-1} ?

- A** 200 N **B** 340 N **C** 2200 N **D** 3800 N