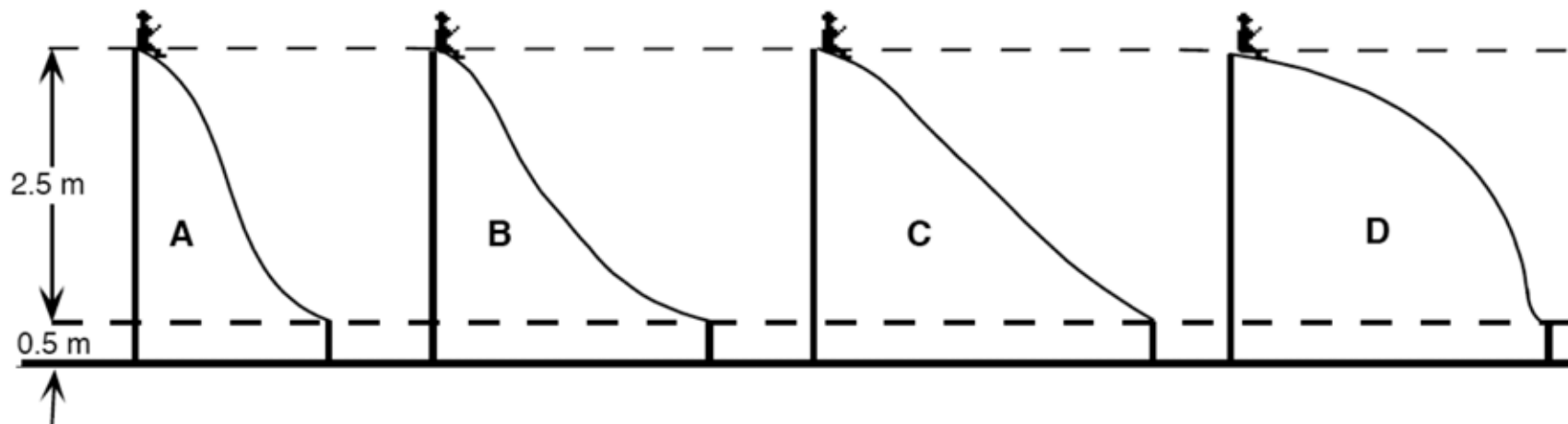
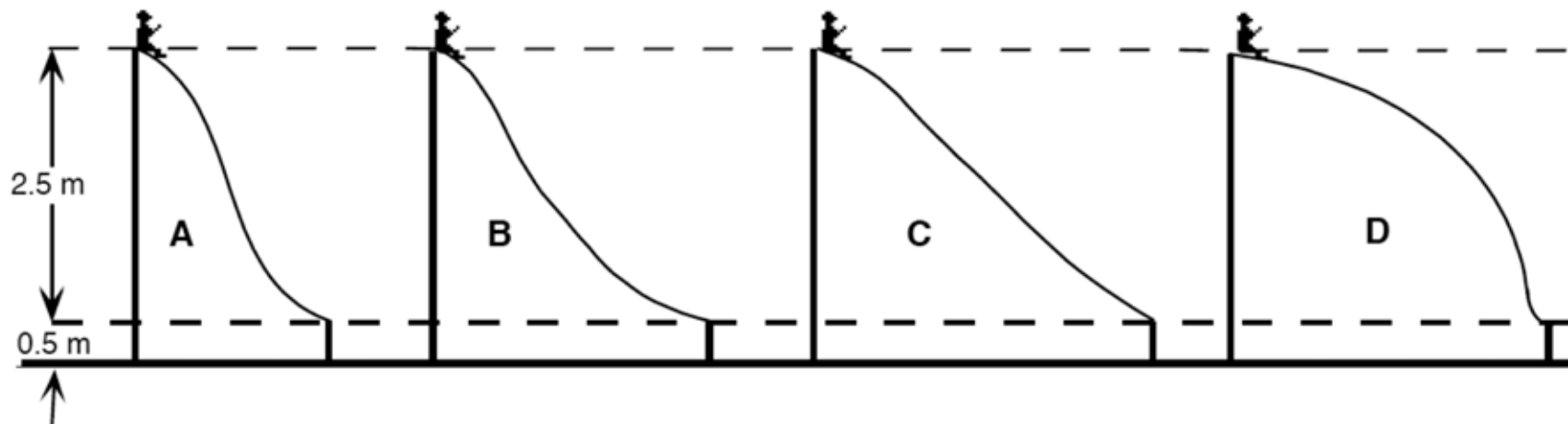


A young girl wishes to select one of the (frictionless) playground slides illustrated below to give her the greatest possible speed when she reaches the ground. Which one should she choose?



A young girl wishes to select one of the playground slides illustrated below to give her the greatest possible speed when she reaches the ground. Which one should she choose? (The slides are no longer frictionless but they all have the same coefficient of friction.)





X and Z mark the highest and Y the lowest position of a 50 kg boy swinging as illustrated in the diagram below. Which of the following is close to the boy's speed at point Y?

1. 2.5 m/s
2. 7.5 m/s
3. 10 m/s
4. 12.5 m/s
5. None of the above

