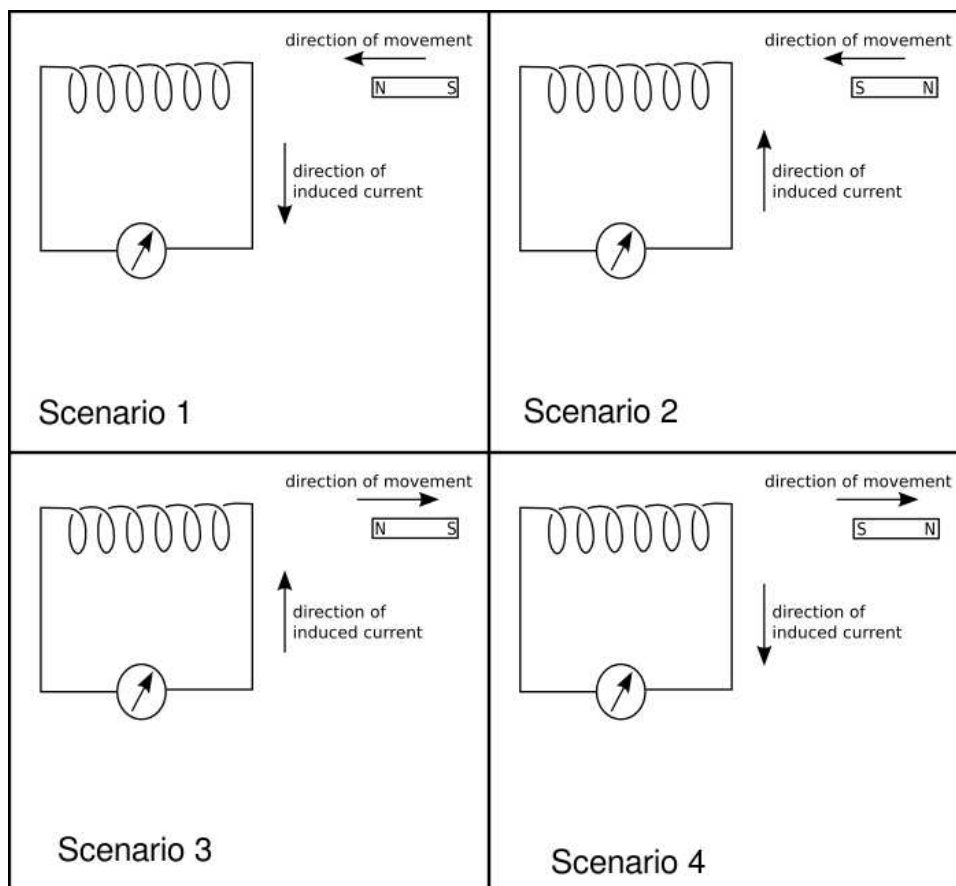


In the diagram below, you can see the direction of induced current based on different scenarios of the direction of movement of the magnet as well as the polarity of the magnet.



1. What do you notice about the difference between Scenario 1 and Scenario 2?
2. What do you notice about the difference between Scenario 1 and Scenario 3?
3. In all the four scenarios, draw in the polarity of the magnet induced by the solenoid based on the direction of current flow. Hint: Use the right-hand rule that you've learnt from electromagnetism.
4. What relationship can you infer from the polarity of the induced magnet? Hint: If the north pole is moving towards the solenoid, which pole is induced closest to the moving magnet? If the south pole is moving towards the solenoid, which pole is induced closest to the moving magnet?
5. Can you conclude whether the induced magnet will oppose or support the direction of movement of the moving magnet?