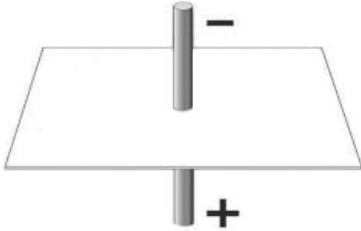
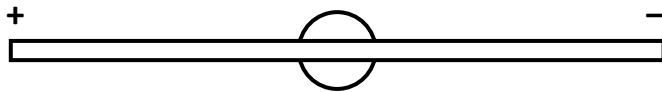


## Straight wire Worksheet

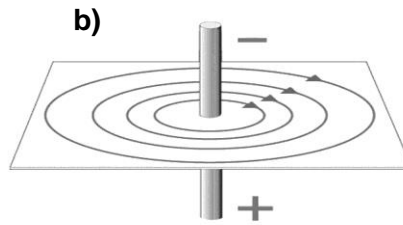
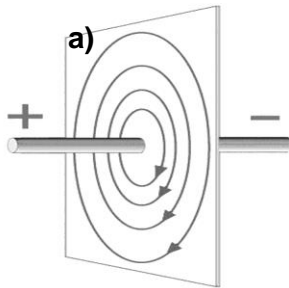
1. Show the current direction for the straight wire.



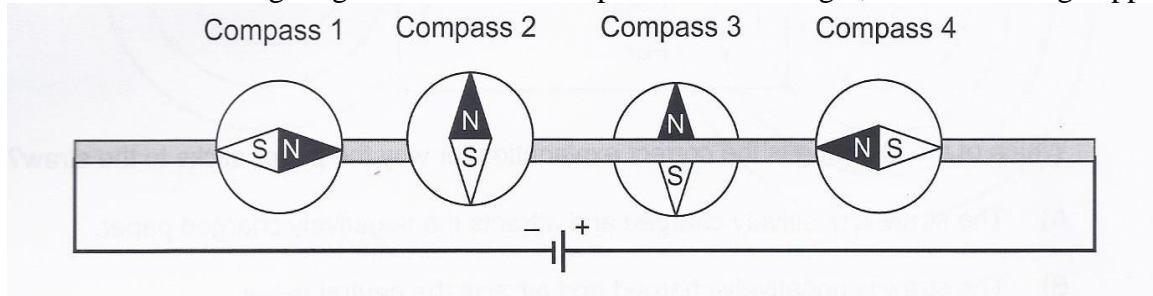
2. Put in the compass direction for the straight wire.



3. Which of the illustrations below is an accurate representation of the magnetic field of a live wire?



4. The following diagram show four compasses and a straight, current-bearing copper wire.

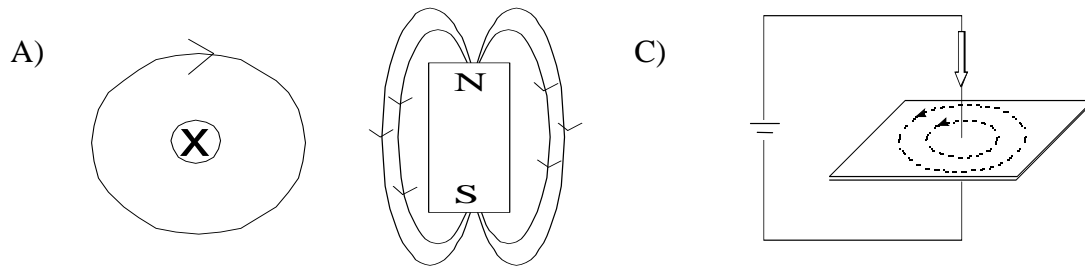


In

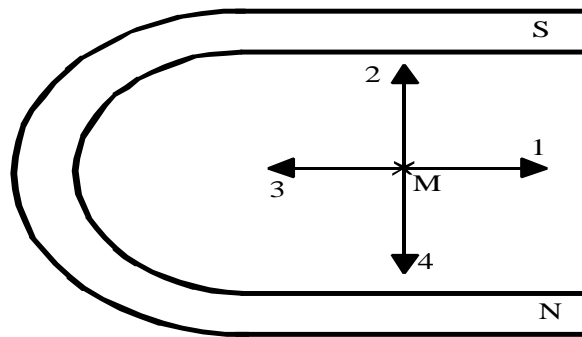
which compass is the needle pointing in the direction of the magnetic field produced by the current flowing through the straight wire?

- A) Compass 1    B) Compass 2    C) Compass 3    D) Compass 4

5. Each diagram below represents the direction of the lines of the magnetic field produced by a given object. Identify the **INCORRECT** diagram.



6. Given a point M in the magnetic field surrounding a U-shaped magnet. Of the four arrows shown below, which one correctly shows the magnetic force which would act on a point charge at point M?



- A) 1      B) 2      C) 3      D) 4