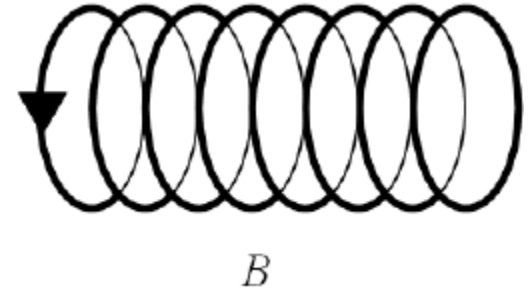
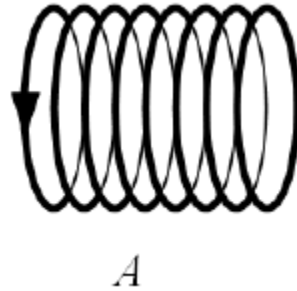


Checkpoint 2

Two solenoids are made with the same cross sectional area and total number of turns. Inductor B is twice as long as inductor A

$$L_B = \mu_0 n^2 \pi r^2 z$$

(1/2)² 2



→ $L_B = \frac{1}{2} L_A$

Compare the inductance of the two solenoids

- A) $L_A = 4 L_B$
- B) $L_A = 2 L_B$
- C) $L_A = L_B$
- D) $L_A = (1/2) L_B$
- E) $L_A = (1/4) L_B$

Inductance of Solenoids: Question 1 (N = 762)

