

# Magnetic Field Application (16)



A current-carrying wire consists of six straight segments as shown.

Find the direction ( $\odot$ ,  $\otimes$ ) and magnitude of the magnetic fields  $B_1, \dots, B_6$  produced by each segment.

Use the general expression  $B = \frac{\mu_0 I}{4\pi a} (\sin \theta_2 - \sin \theta_1)$  and identify the quantities  $a, \theta_1, \theta_2$  for each segment.

