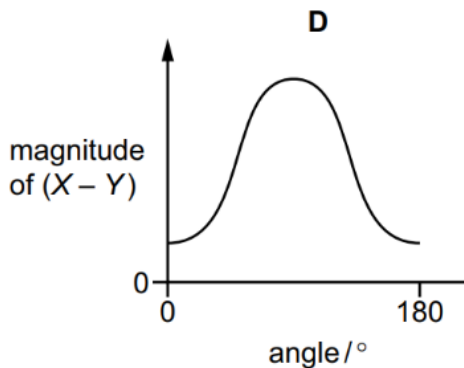
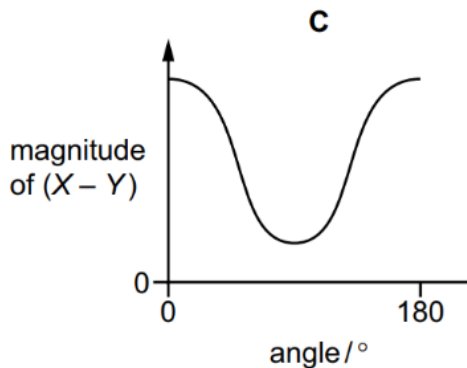
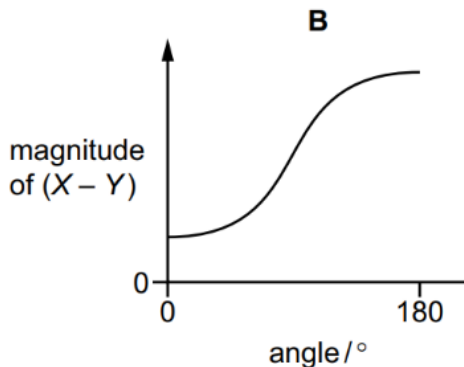
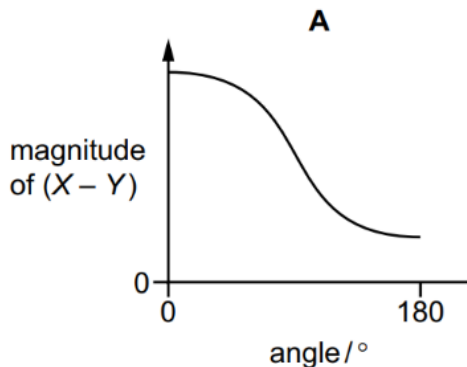


- 4 X and Y are vectors. The magnitude of X is less than the magnitude of Y. The vectors are initially in opposite directions.

As Y is rotated through  $180^\circ$ , how does the magnitude of the vector  $(X - Y)$  vary?



- 5 A car, starting from rest at time  $t = 0$ , travels along a road. The distance travelled from the starting