

# Booth's Algorithm (Implementation)

**M:** 0 1 0 1 1    **Q:** 0 1 1 1 0



| $Q_{LSb}$ | $Q_{-1}$ | Operation                            |
|-----------|----------|--------------------------------------|
| 0         | 0        | Arithmetic Right Shift               |
| 0         | 1        | $Acc \leftarrow Acc + M$ , ARS       |
| 1         | 0        | $Acc \leftarrow Acc + \bar{M}$ , ARS |
| 1         | 1        | Arithmetic Right Shift               |

91

COA

