(1) State the quotient remainder theorem.

(2) Define the following:
   (a) \( n \text{ div } d \)

   (b) \( n \mod d \)

   (c) \( [x] \)

   (d) \( [x] \)

(3) Compute the following:
   (a) \( 17 \text{ div } 3 = \)

   (b) \( -19 \mod 4 = \)

   (c) \( [19/2] = \)

   (d) \( [-47/5] = \)