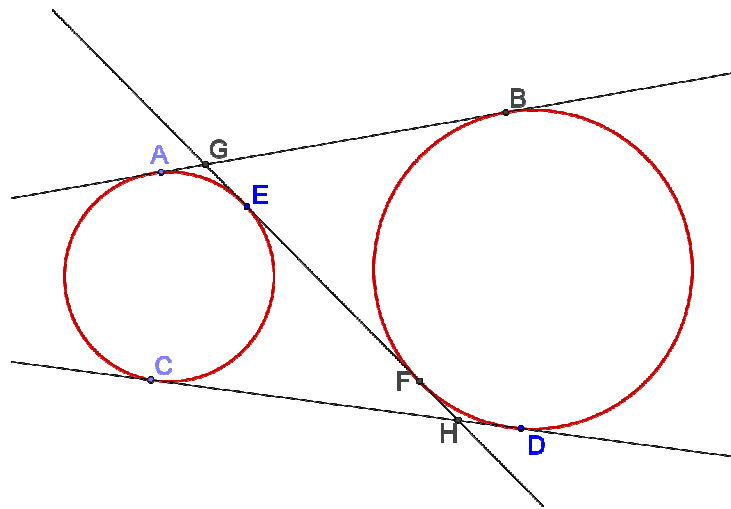


Three tangents problem

Prove that : $GE = FH$



(1) $AB = CD$

(2) $AB = AG + GB = GE + GE$
 $= GE + (GE + EF)$
 $= 2GE + EF$

(3) $CD = CH + HD = EH + FH$
 $= (EF + FH) + FH$
 $= EF + 2FH$

(4) By (1), (2) and (3), $GE = FH$