

diagonalibus AC, AD, FH, FI, similia erunt triangula ABC, FGH, & ACD, FHI atque ADE, FIK. Nam cum anguli B, G æquales sint & lateribus proportionalibus comprehensi, similia erunt triangula ABC, FGH, & ADF, IFK. Itaque angulus BAC $\equiv$ GFH, DAE $\equiv$ FIK. Ergo BAE $\equiv$ BAC $\equiv$ DAE $\equiv$ CAD $\equiv$ GFK $\equiv$ GFH $\equiv$ IFK $\equiv$ HFI. Igitur angulus CAD $\equiv$ angulo HFI. Simili modo ostenditur angulos ACD, FHI, & ADC, FIH æquales esse. Quare triangula ACD, FHI sunt æquiangula.

Viceversa duæ figuræ quælibet similes sunt, si in triangula æquiangula resolvi possint. Nam ob angulos æquales in triangulis æquiangulis, æquales sunt anguli homologi in unaquaque figura. Quare cum latera figurarum sint triangulorum æquiangulorum latera proportionalia, figuræ similes sunt.

COR. Si dividatur BC in L, latusque homologum GH in M in eadem ratione, ita ut sit BC: GH $\equiv$ I C: MH. Deinde si ducantur rectæ duæ ad arbitrium LN, MO, quæ angulos CLN, HMO æquales efficiant; vel quæ dividant latera homologa ED, KI in eadem ratione, ita ut sit ED: KI $\equiv$ DN: IO, erit LN: MO $\equiv$ CD: HI $\equiv$ BC: GH &c. Nam ductis NC, OH, triangula NCD, OHI similia sunt ob angulos D, I æquales lateribus proportionalibus ND, DC, & OI, IH comprehensos. Quare CD: HI $\equiv$ CN: HO, & angulus CDN $\equiv$ IHO. Si ergo anguli illi auferantur ex angulis æqualibus DCL, IHM, remanebunt æquales anguli NCL, OKM, ac proinde triangula NCL, OHM similia sunt, ideoque LN: MO