## Construction 41: Book VI, Proposition 11

From two given straight lines to find a third proportional. ([V. Def. 6])
VI.11:2. Let BA, AC be the two given straight lines, and let them be placed so as to contain any angle;


C
VI.11:7. For let them be produced to the points $\mathrm{D}, \mathrm{E}$, and let BD be made equal to AC ; [I.3, compass]

VI.11:10. let BC be joined,


D
VI.11:10. and through D let DE be drawn parallel to it. [I.31]

WANTED

GOSUB I.31, C\#10.

GOSUB I.23, C\#9.
Relabel.

I.23:10. let d'e' be joined.


Swing the hot arm around d'.


Swing the cold arm around g'.


Connect the left crossing i' to d' and extend.

## Cleanup.

RETURN to I. 31 .
RETURN to VI.11:10.
Relabel.

VI.11:16. as AB is to $A C$, so is AC to CE.
Q.E.F.


E

