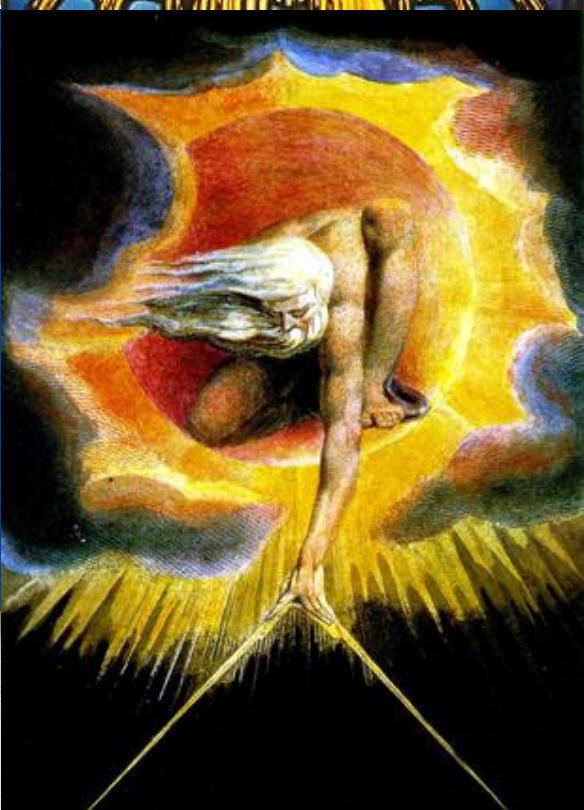
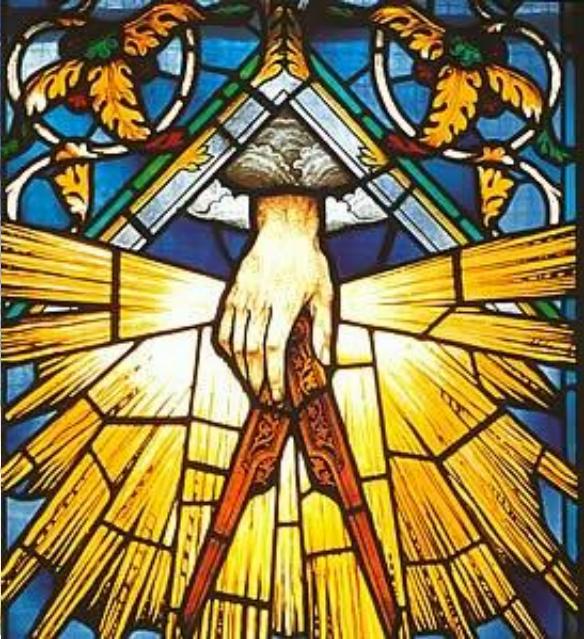


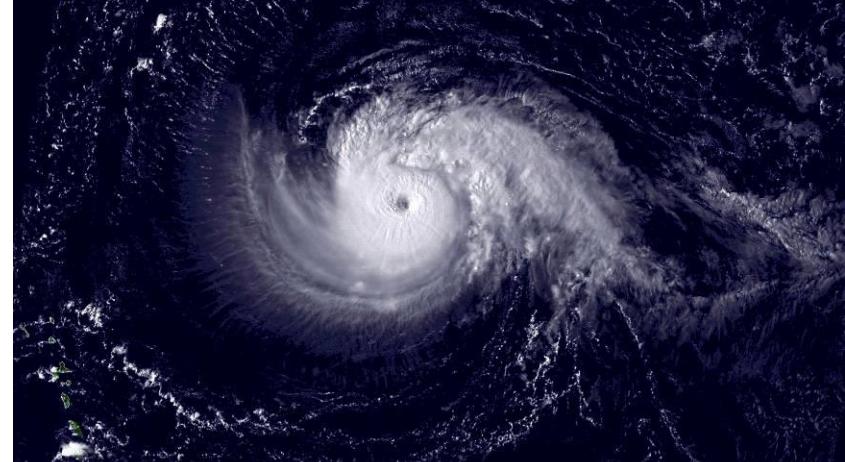
SACRED GEOMETRY

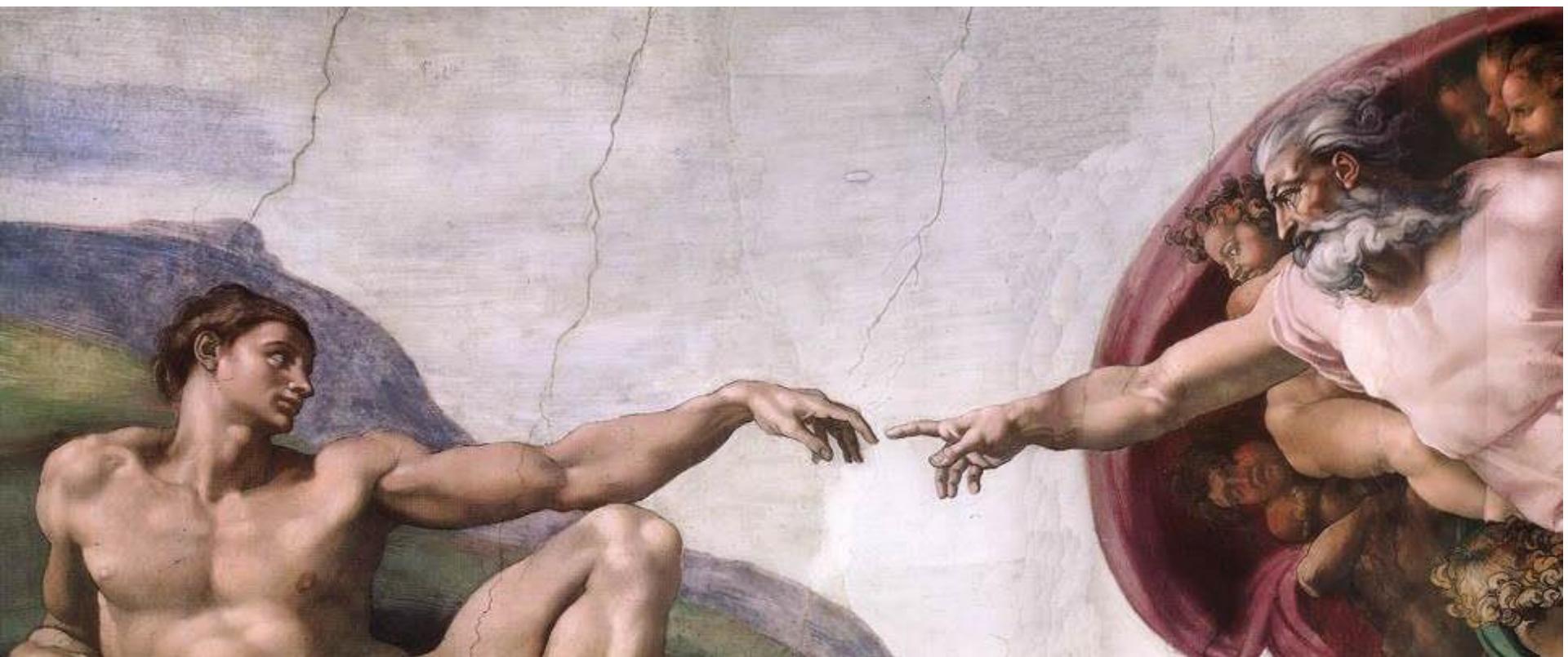
Exploring its Archetypal Language and Origins

Prof. Brandon Ro, AIA, NCARB
Classical Architecture Workshop

ORIGINS



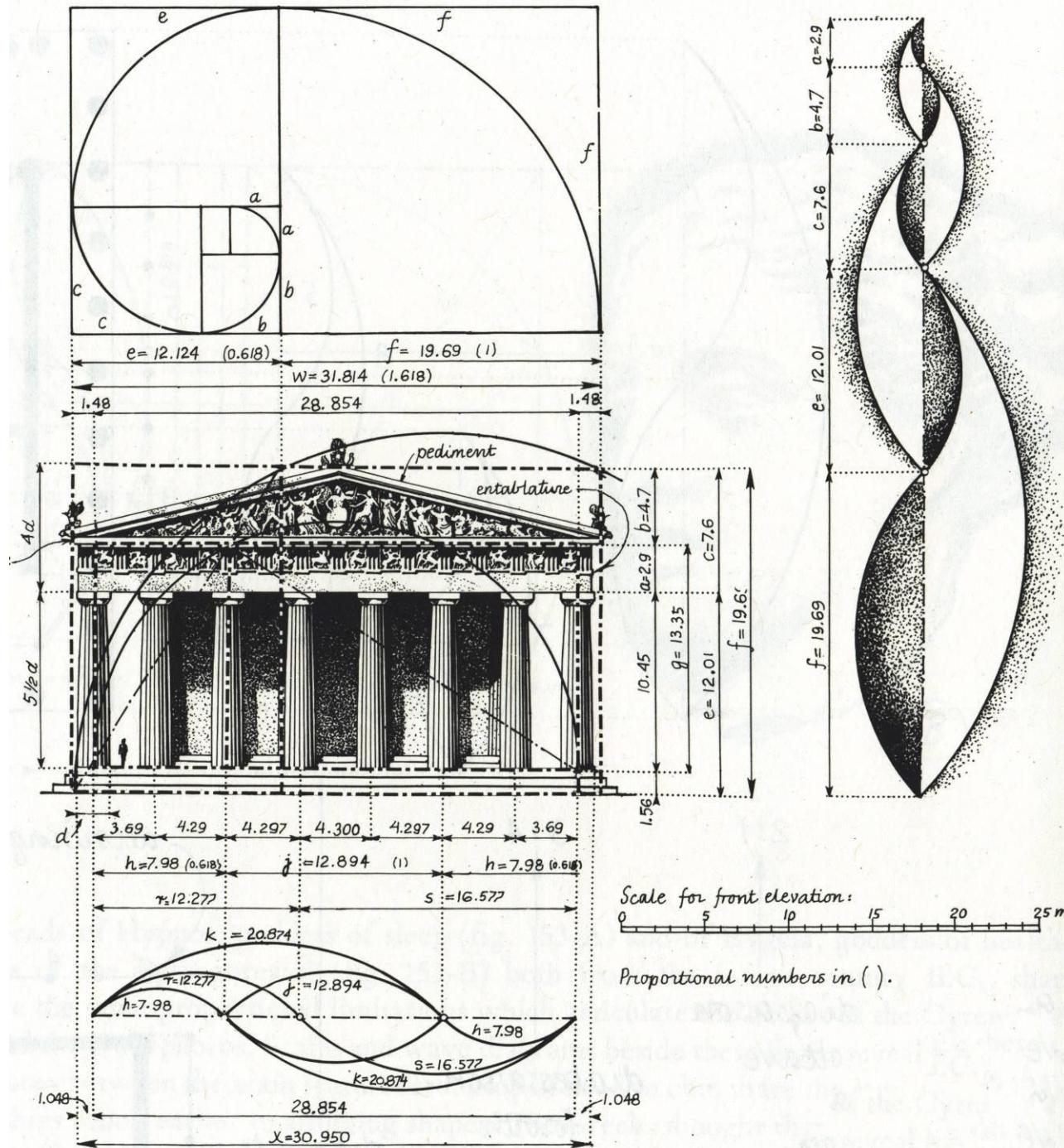
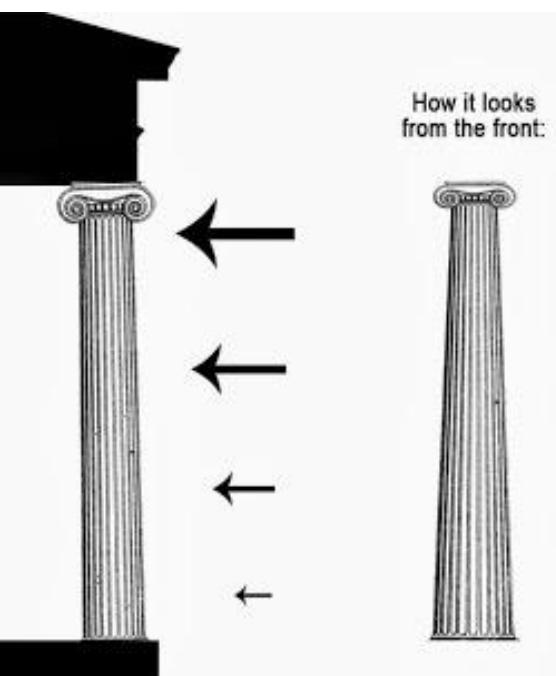






PAINTED BY J. COPE
FOR THE TOWN OF BOSTON





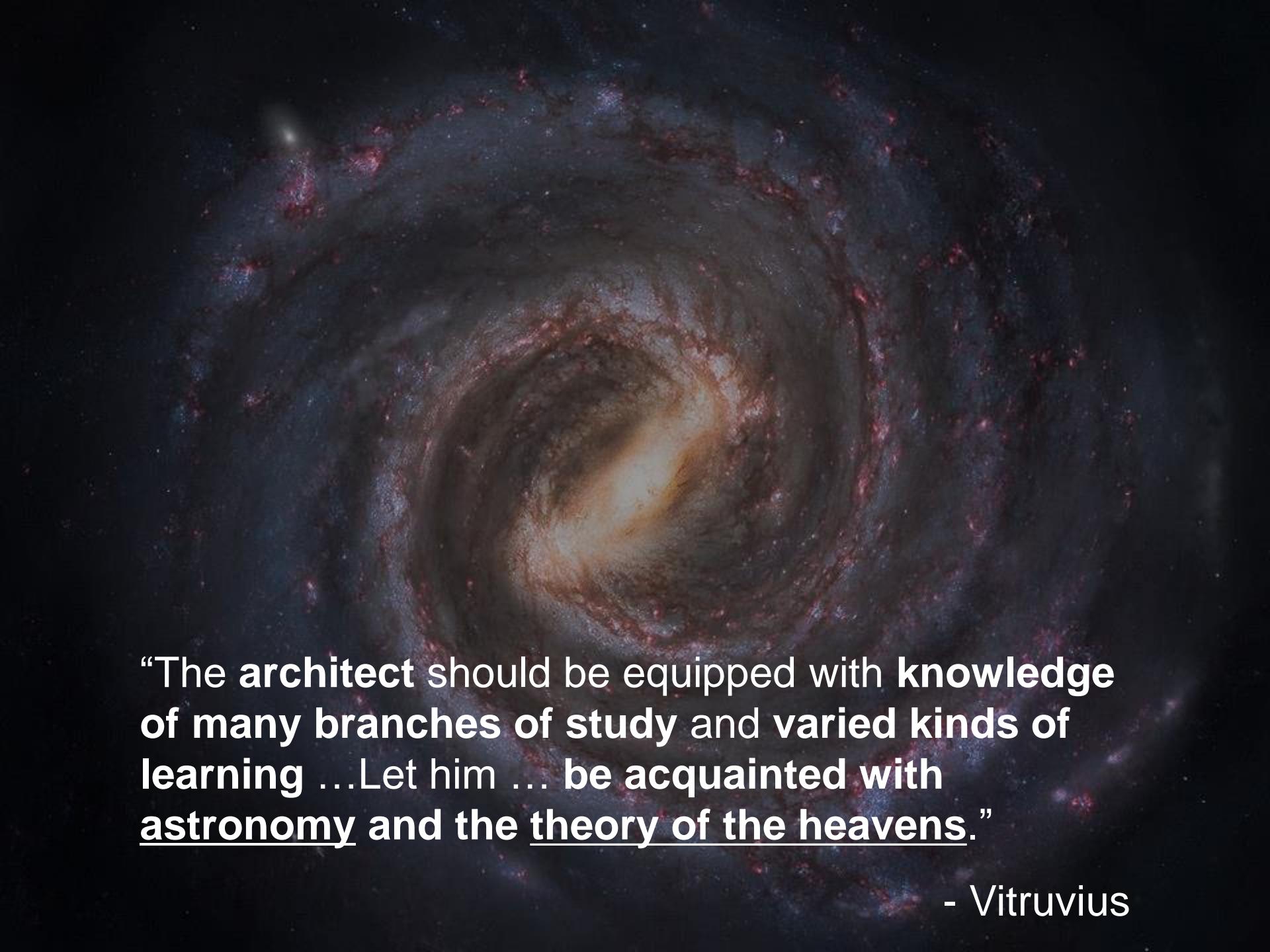


MONAD

“ 1 ”

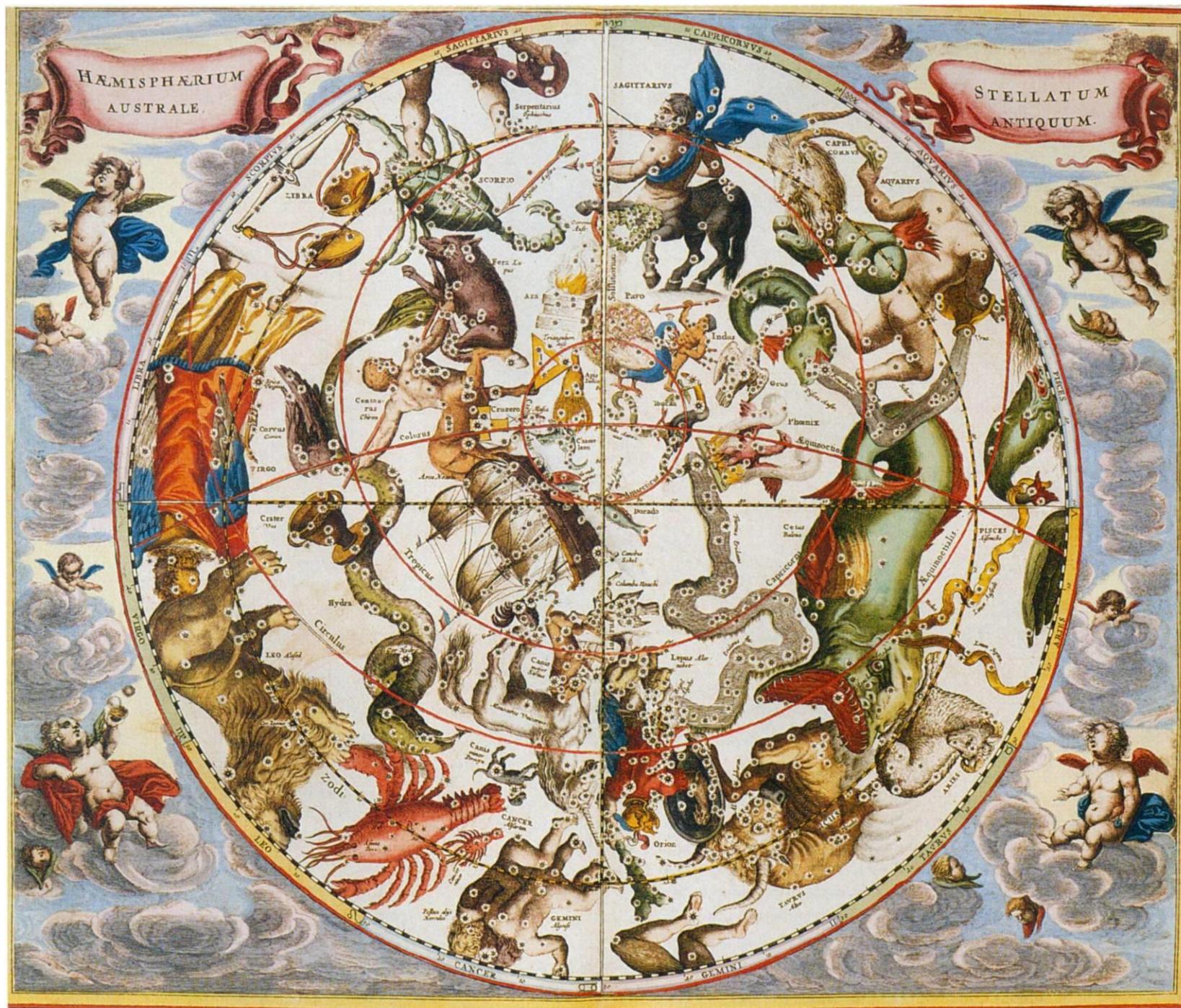


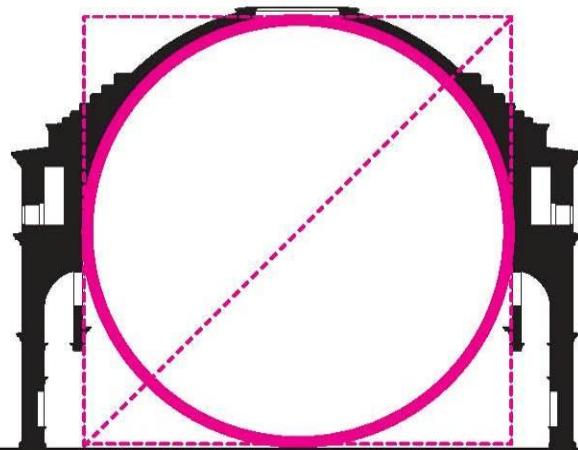
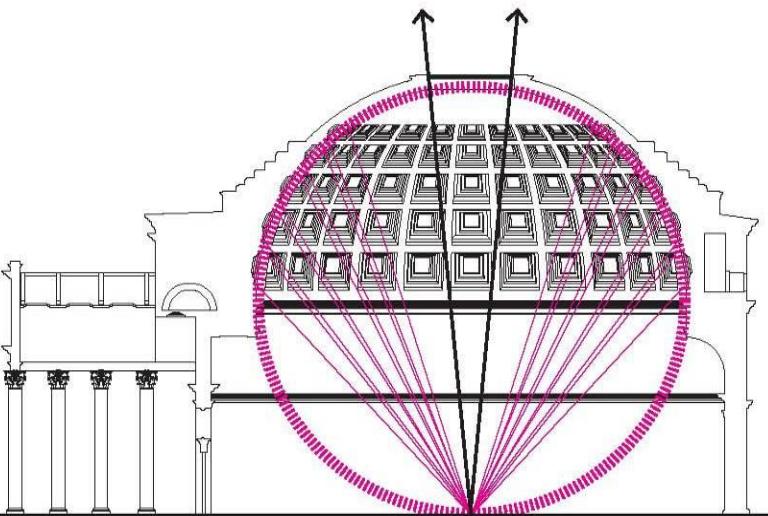
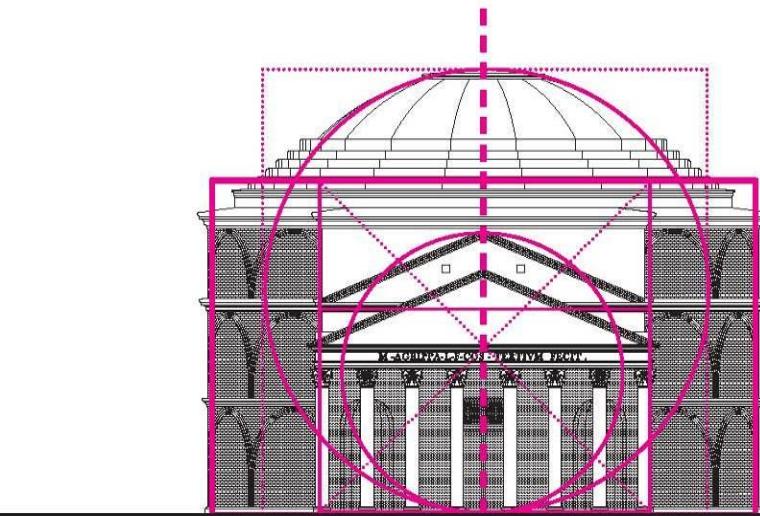
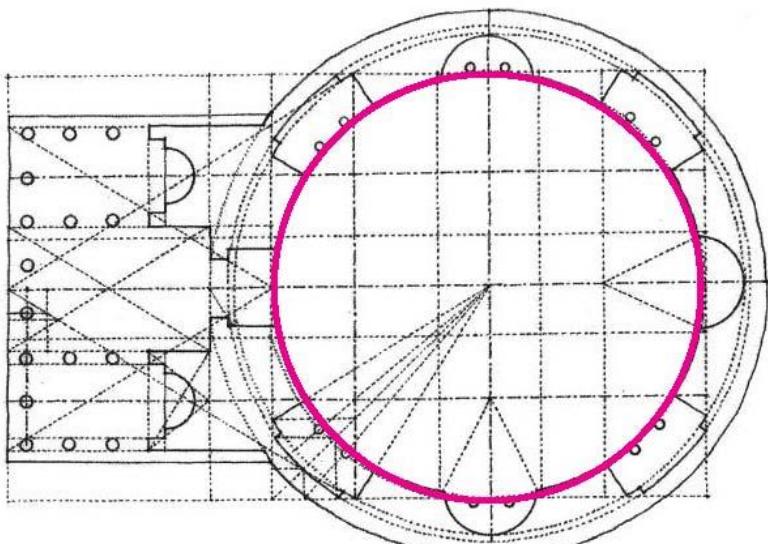




“The architect should be equipped with **knowledge of many branches of study** and **varied kinds of learning** ... Let him ... be acquainted with **astronomy** and the **theory of the heavens**.”

- Vitruvius



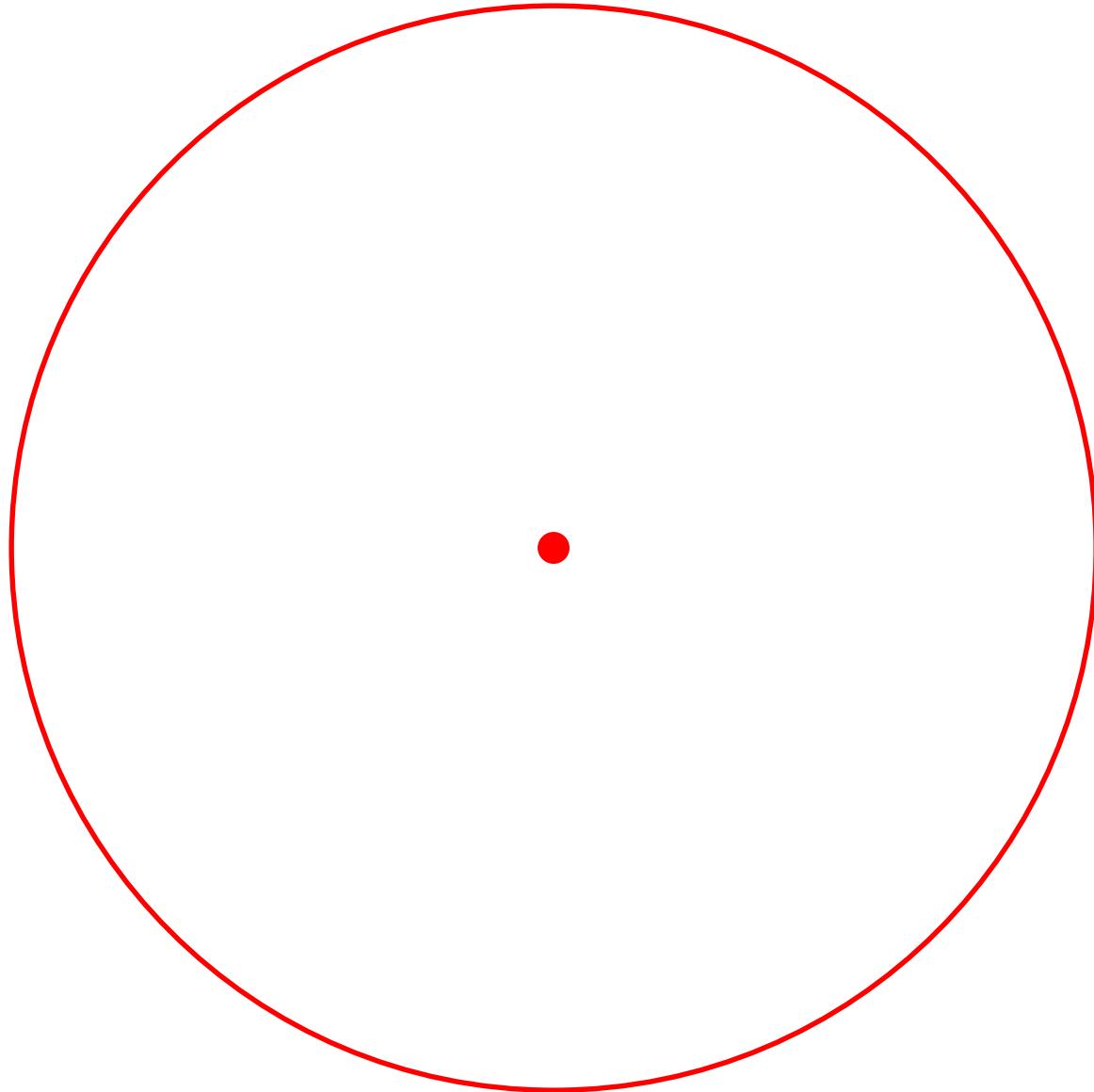






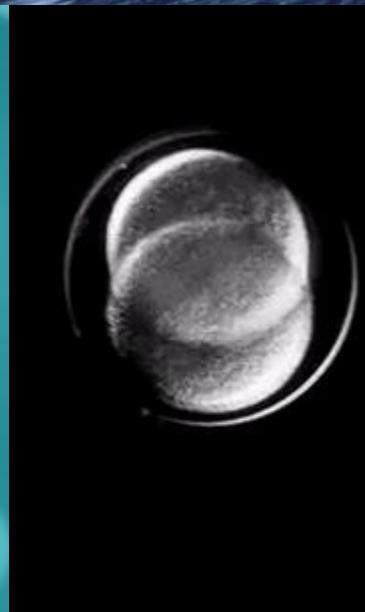
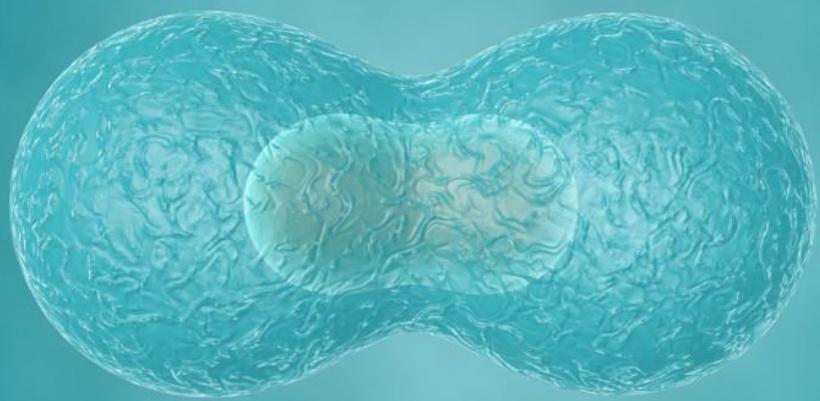
How to Construct the Circle





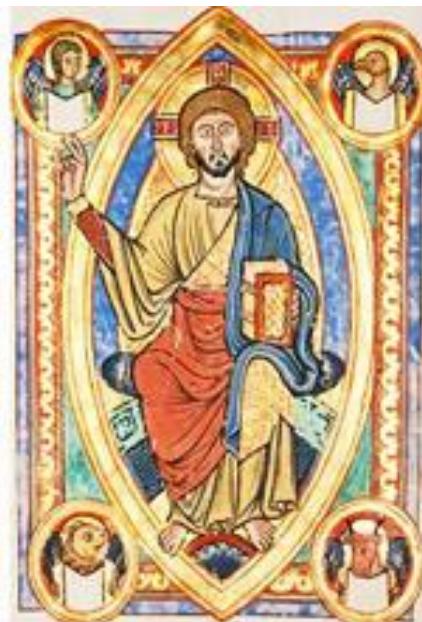
DYAD

“2”

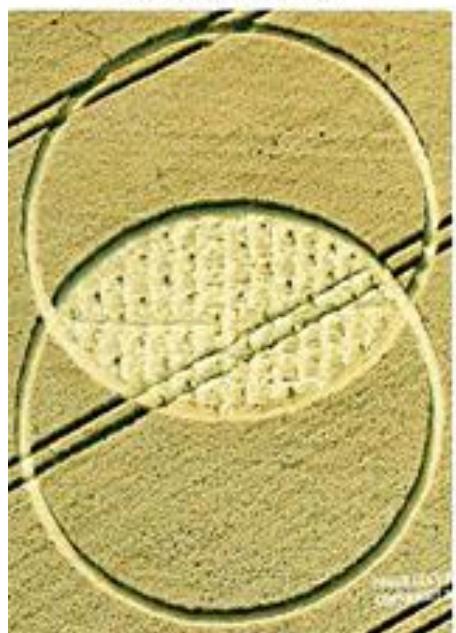




mandorla



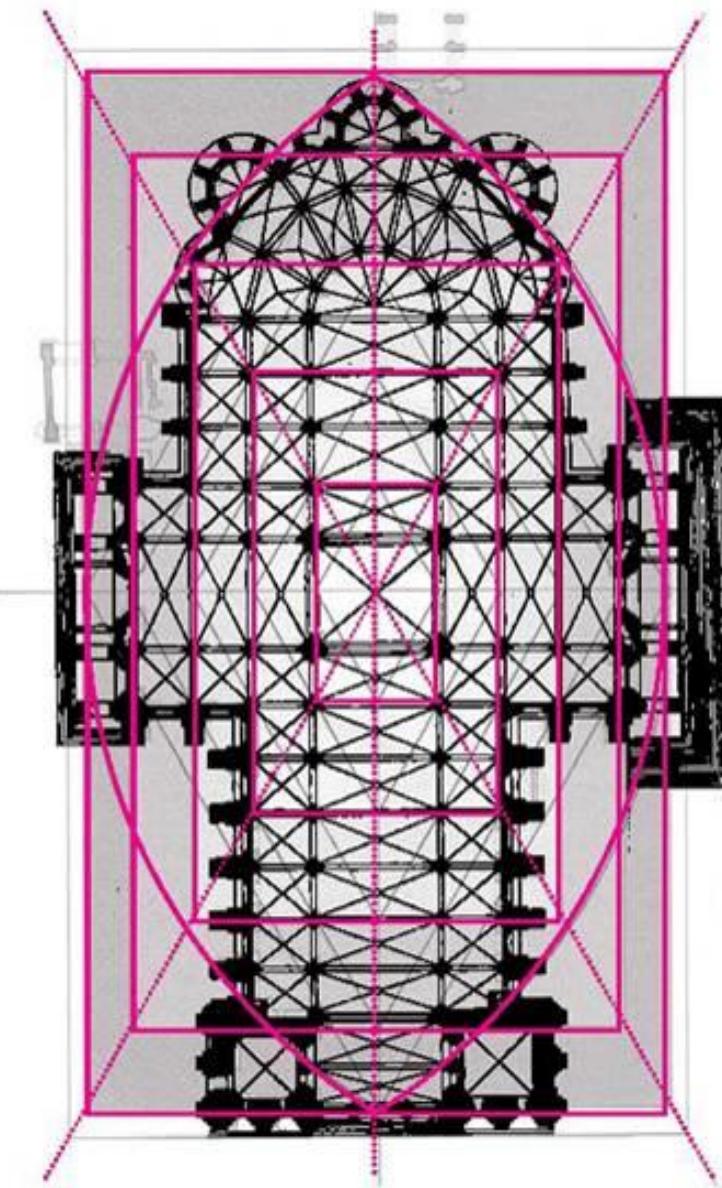
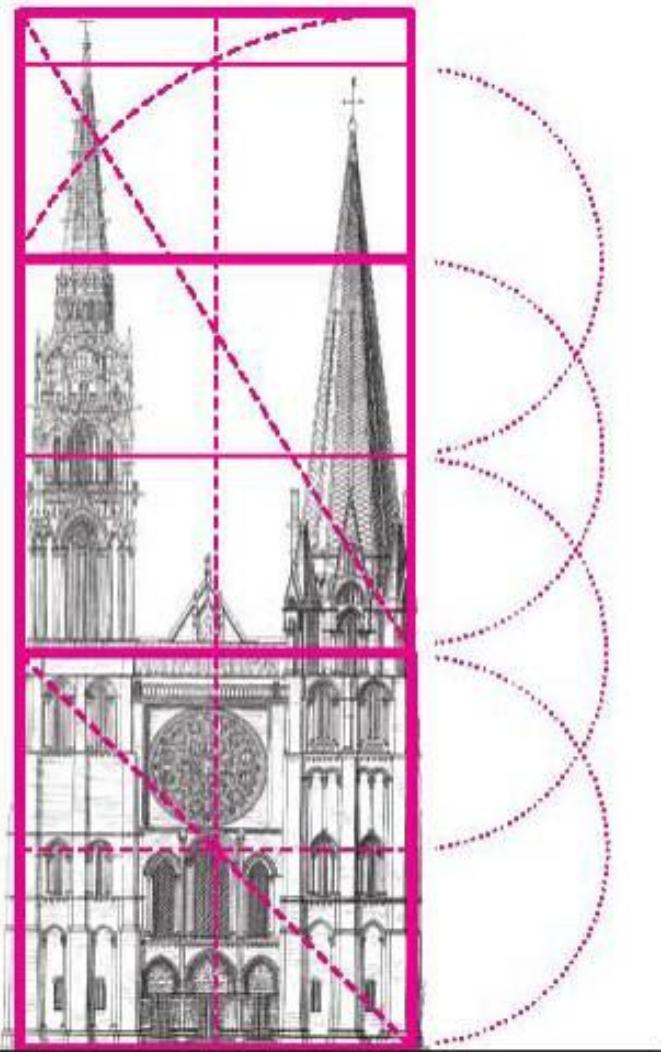
Vesica Piscis



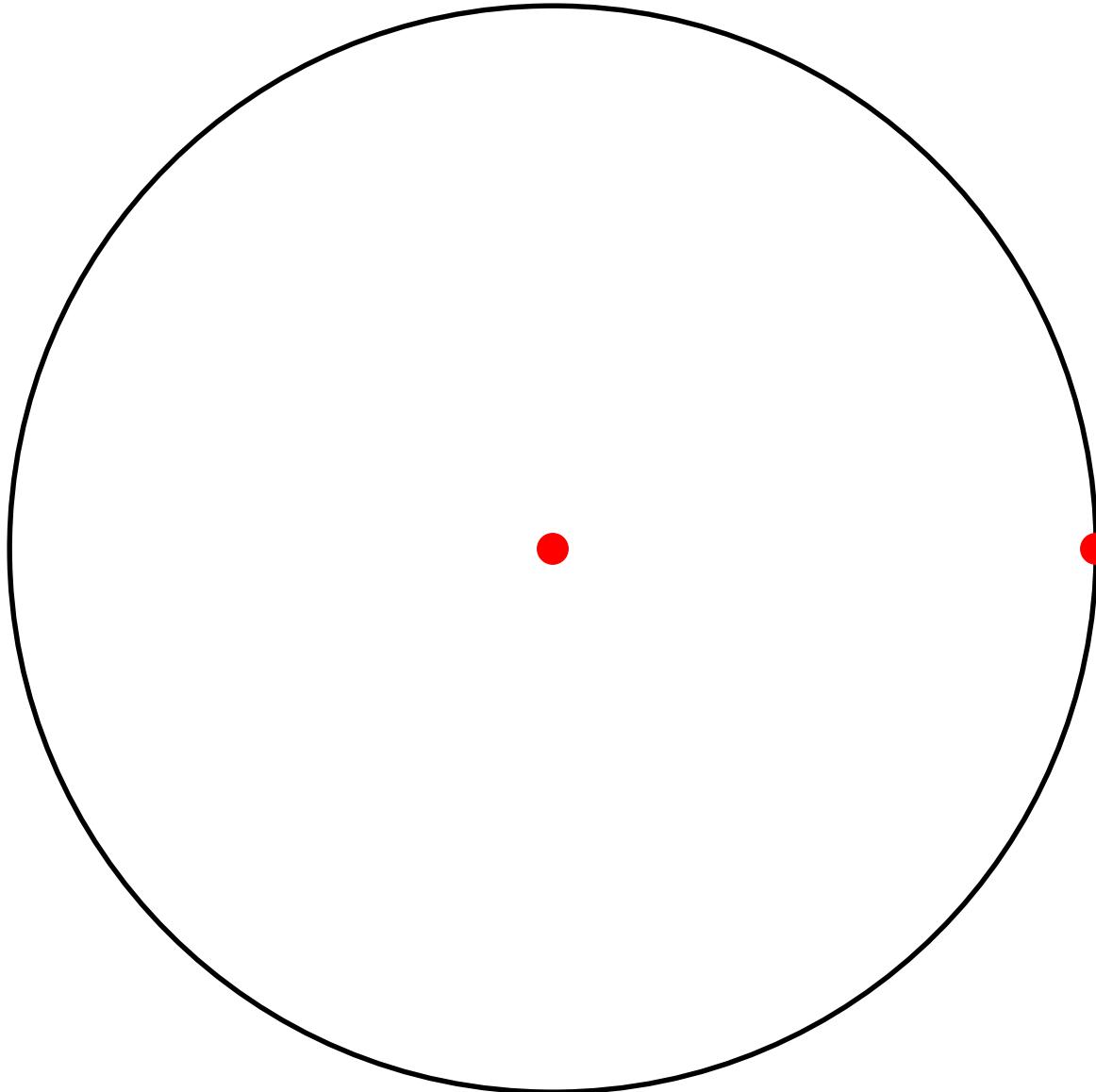
August 9, 2015 at Fox Hill

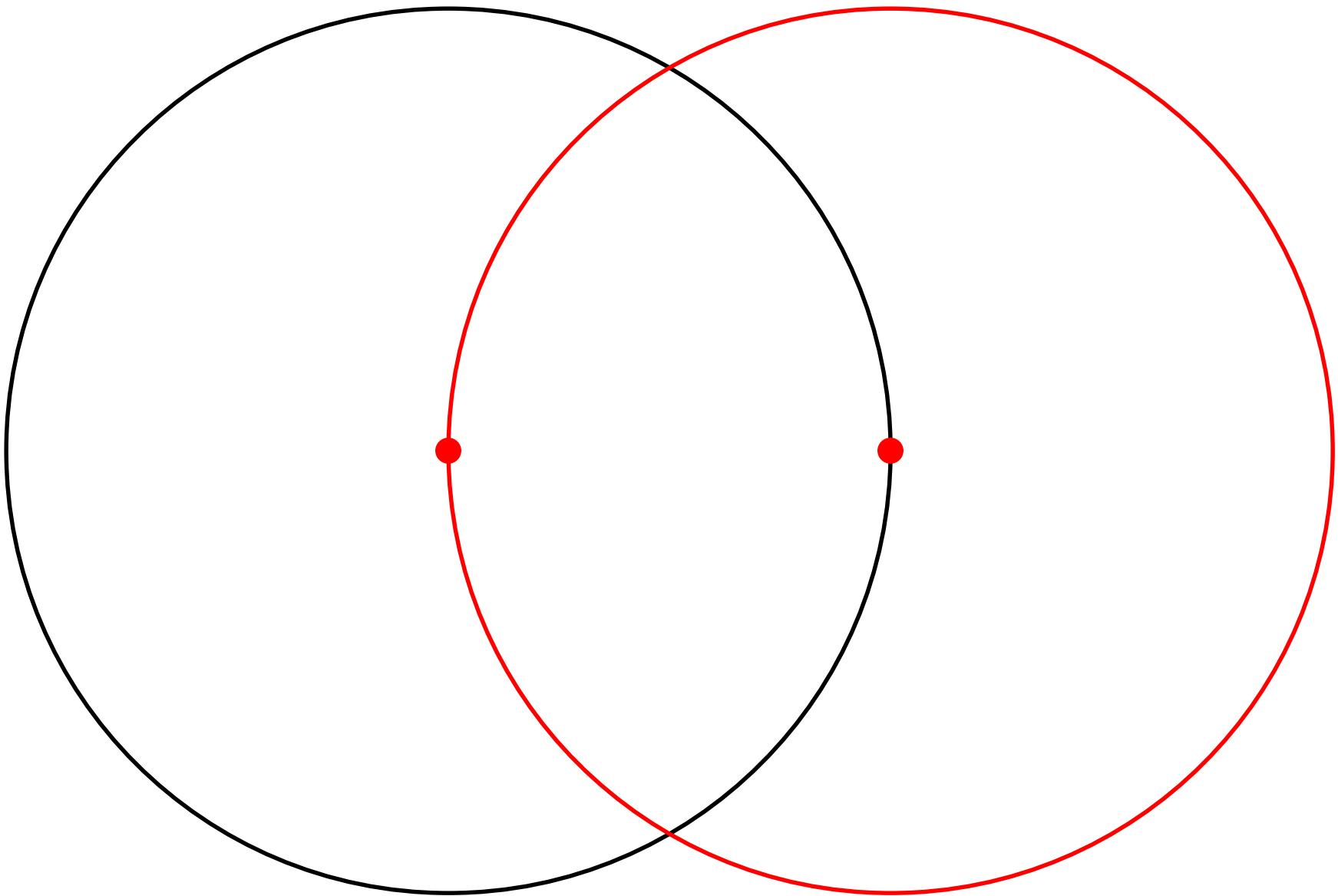
RC thanks to Lucy Pringle

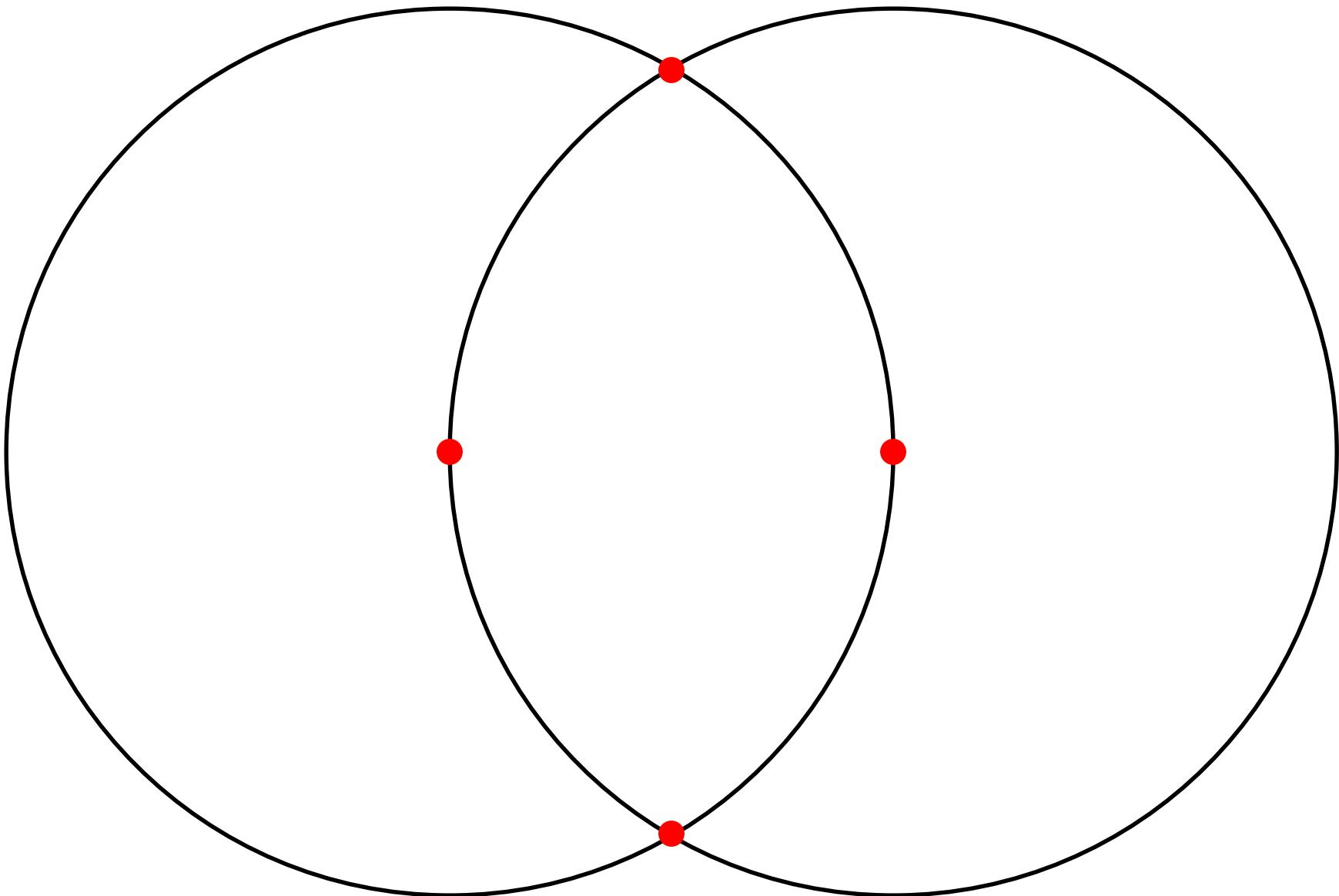


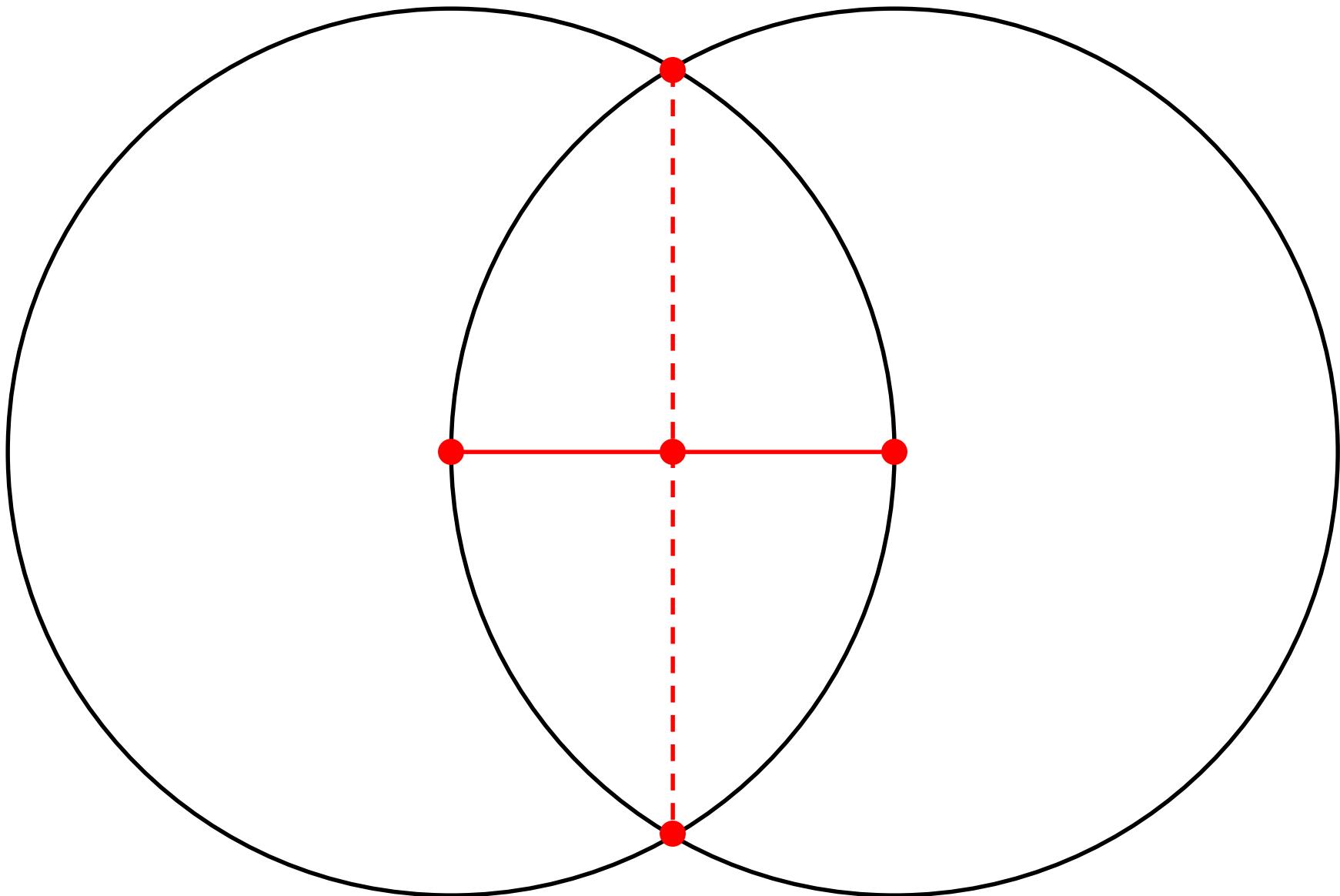


How to Construct the Vesica Piscis and Line









TRIAD

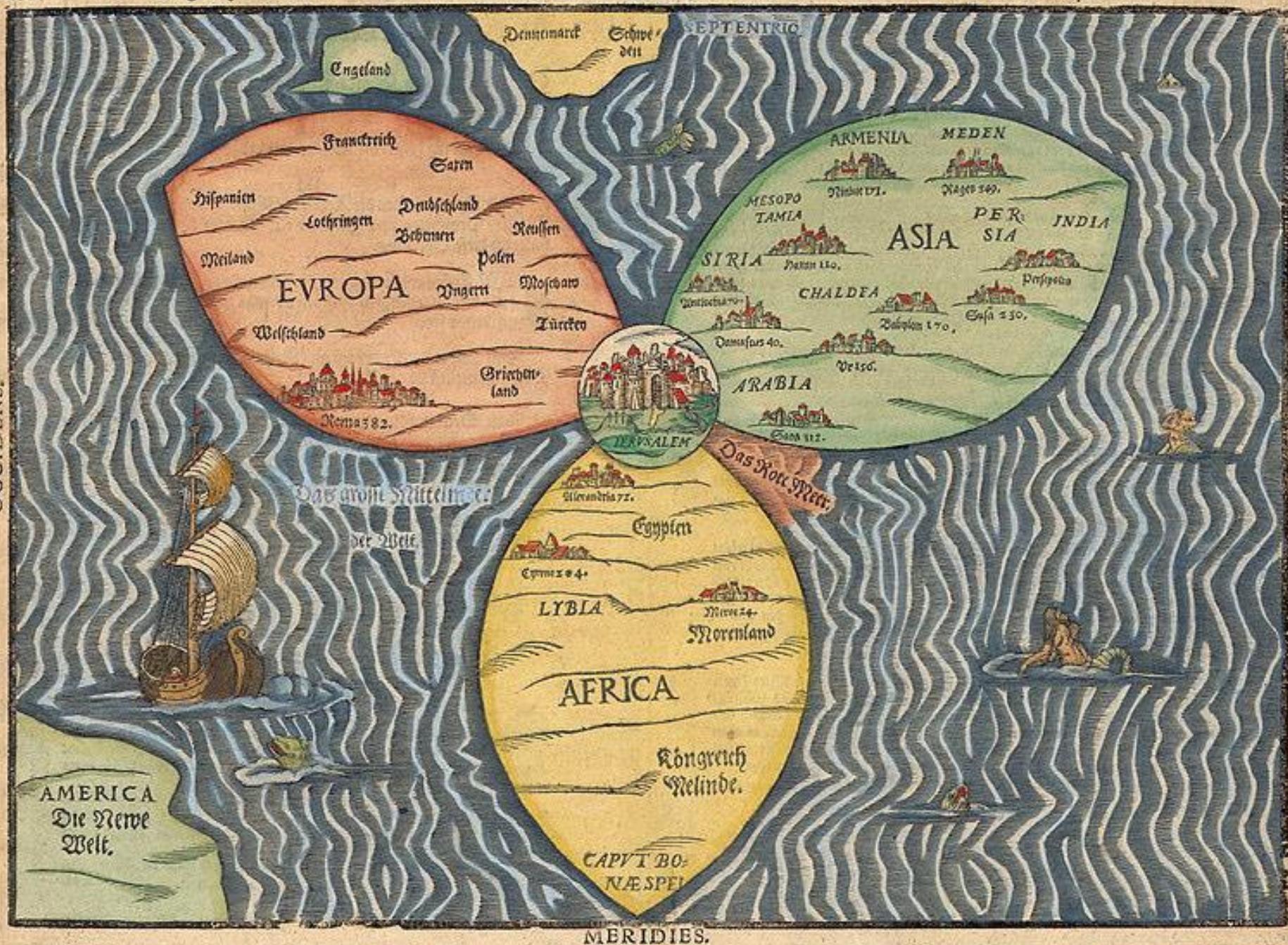
“3”





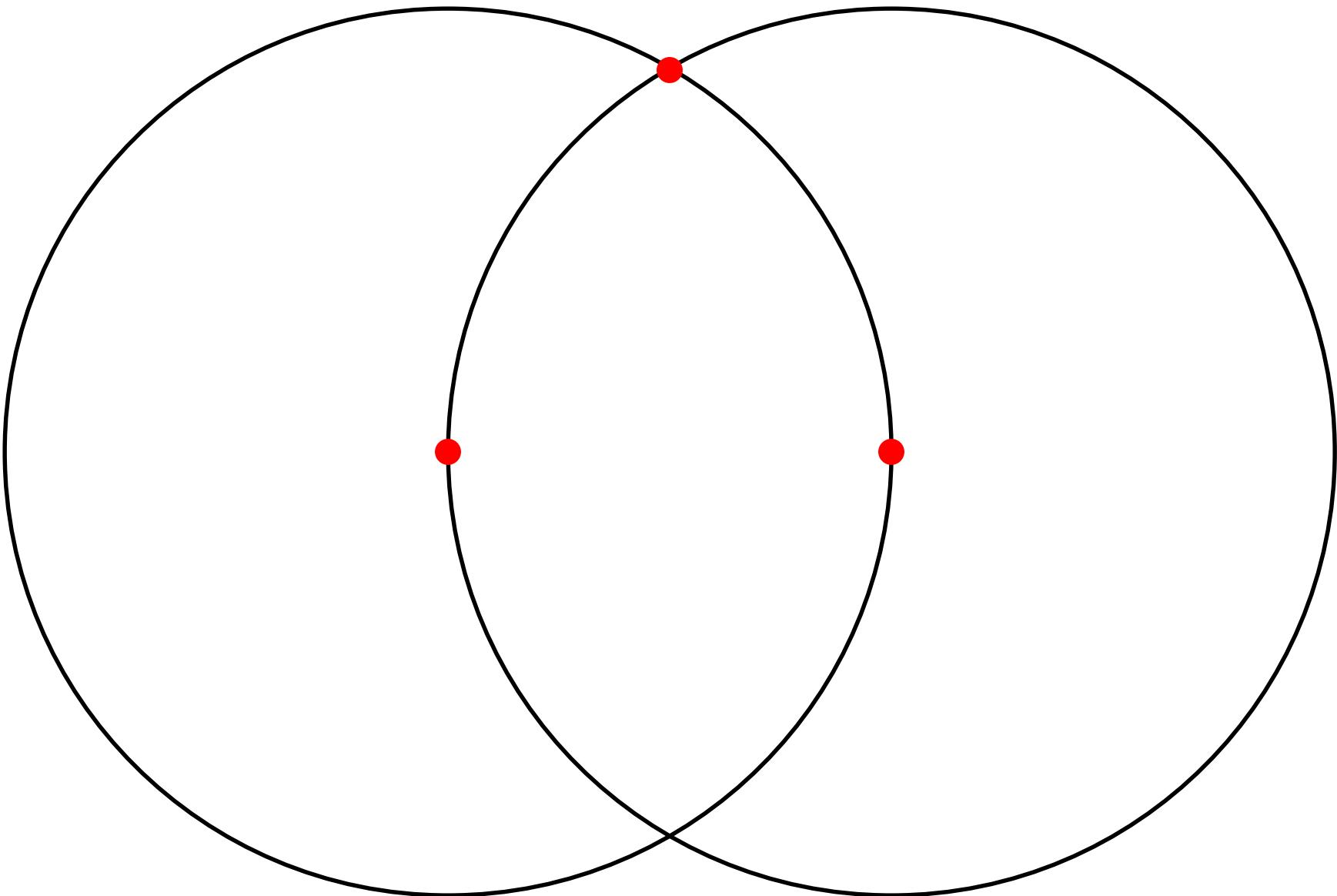


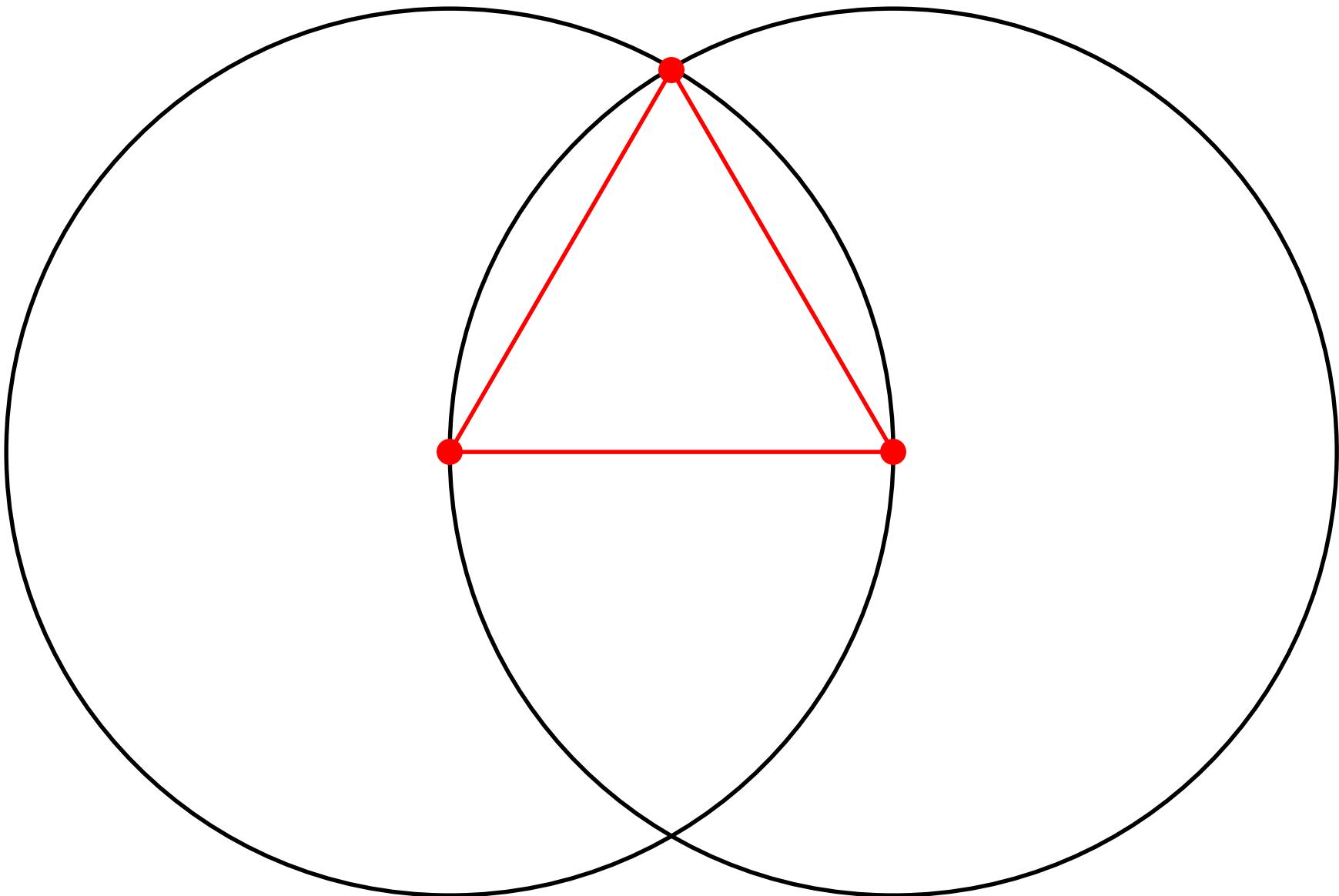


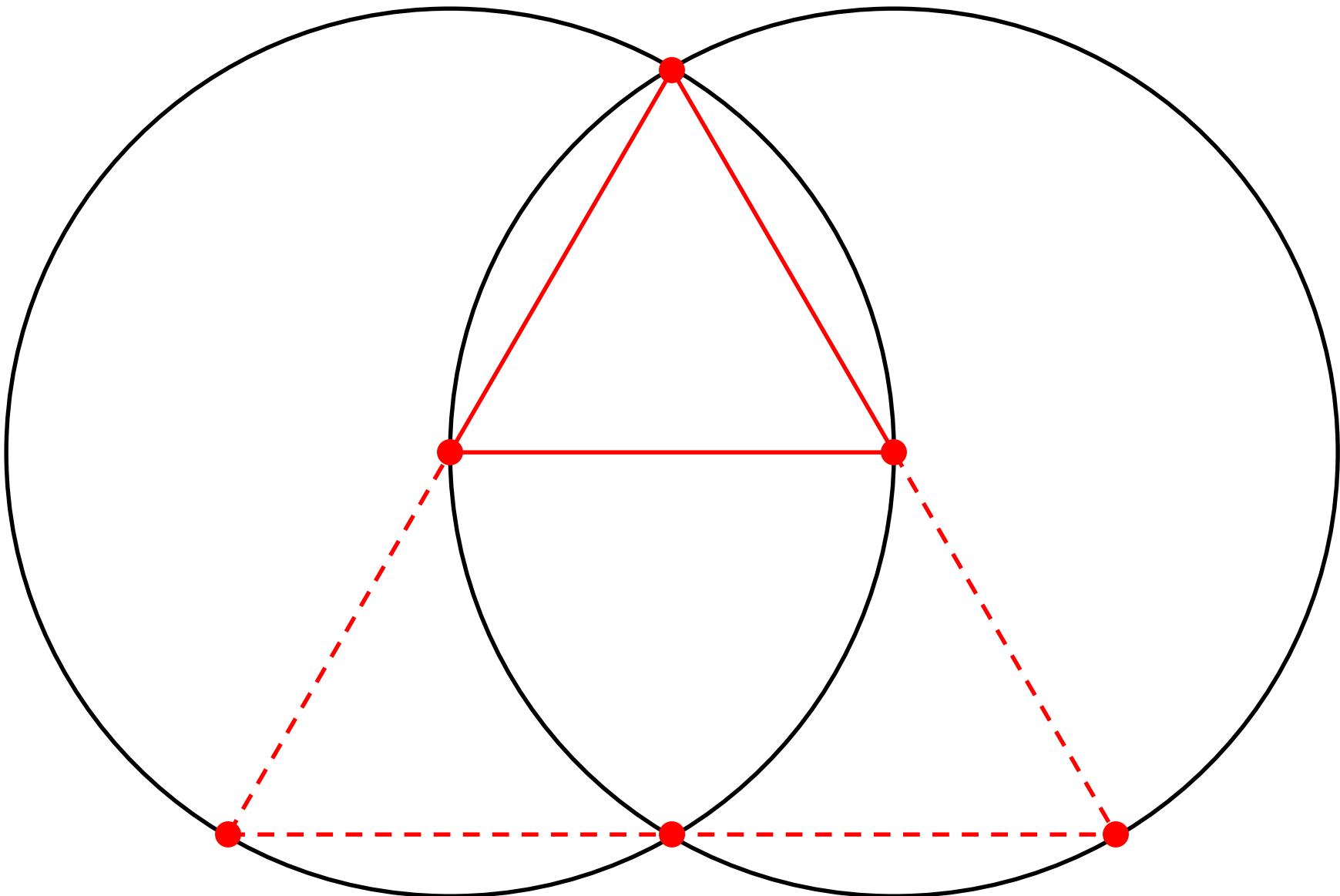


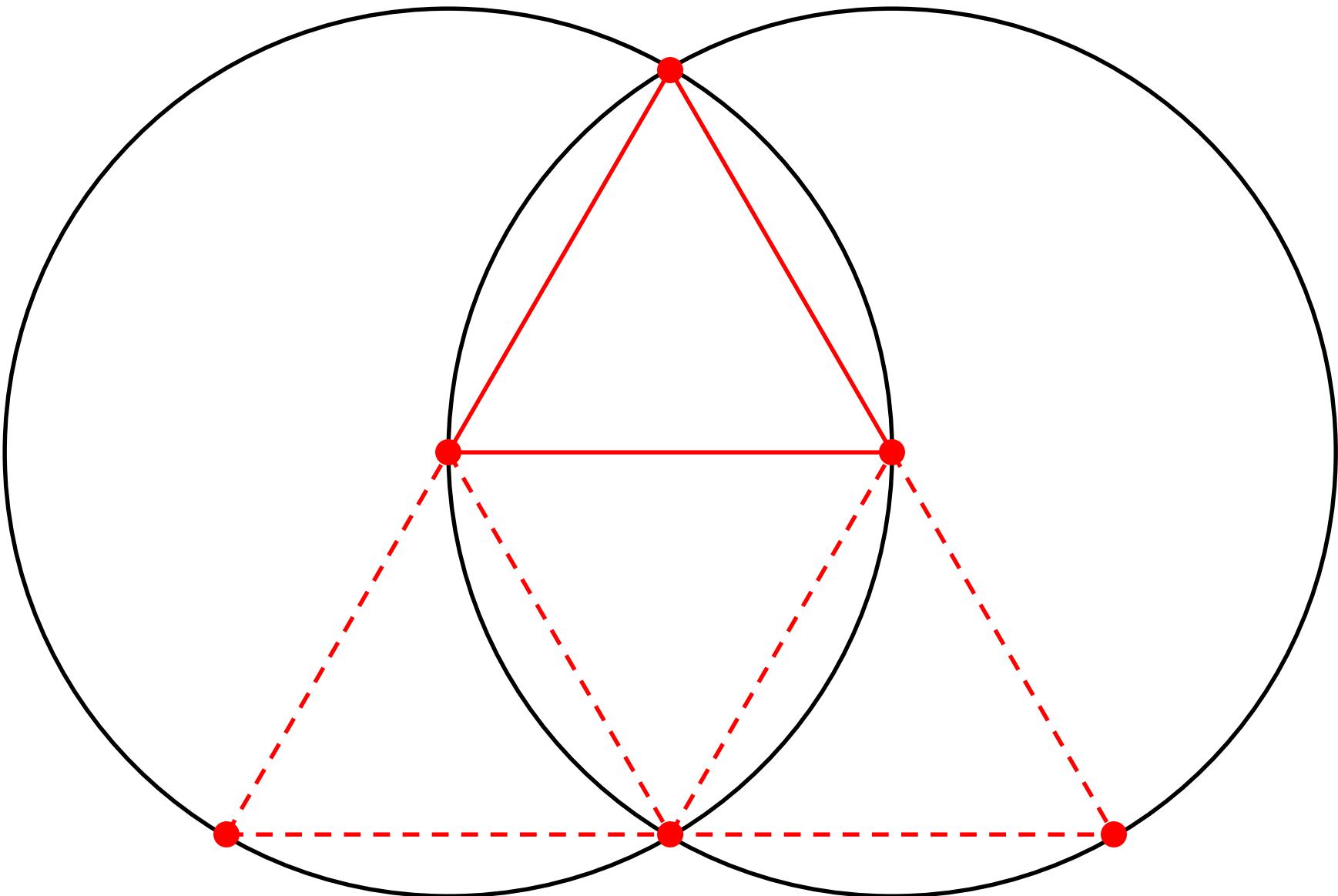


How to Construct the Triangle









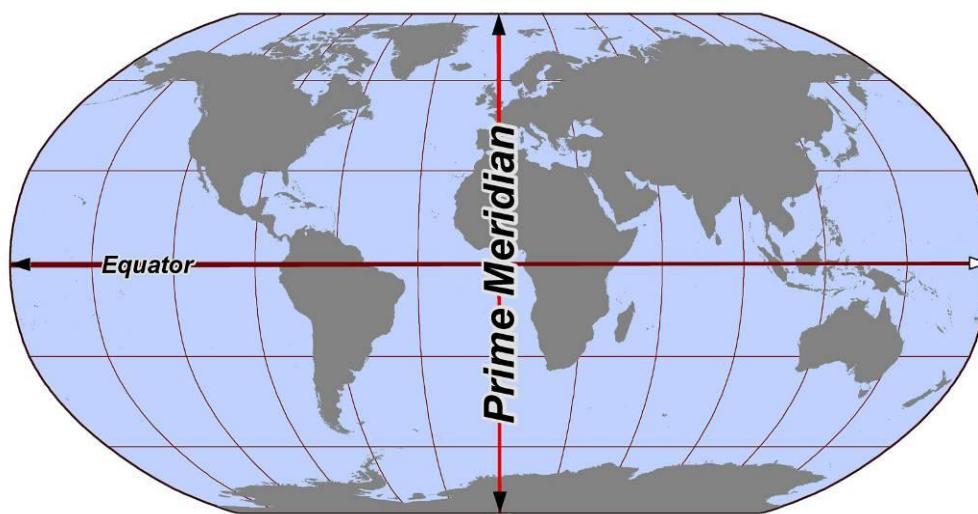
TETRAD

“4”

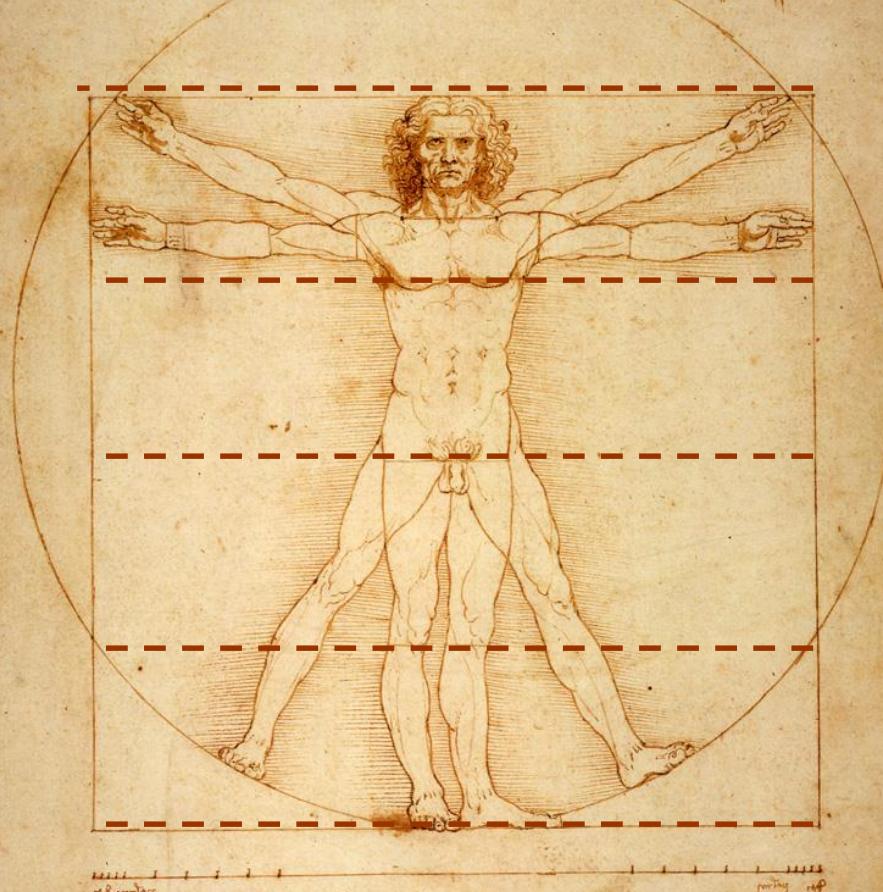




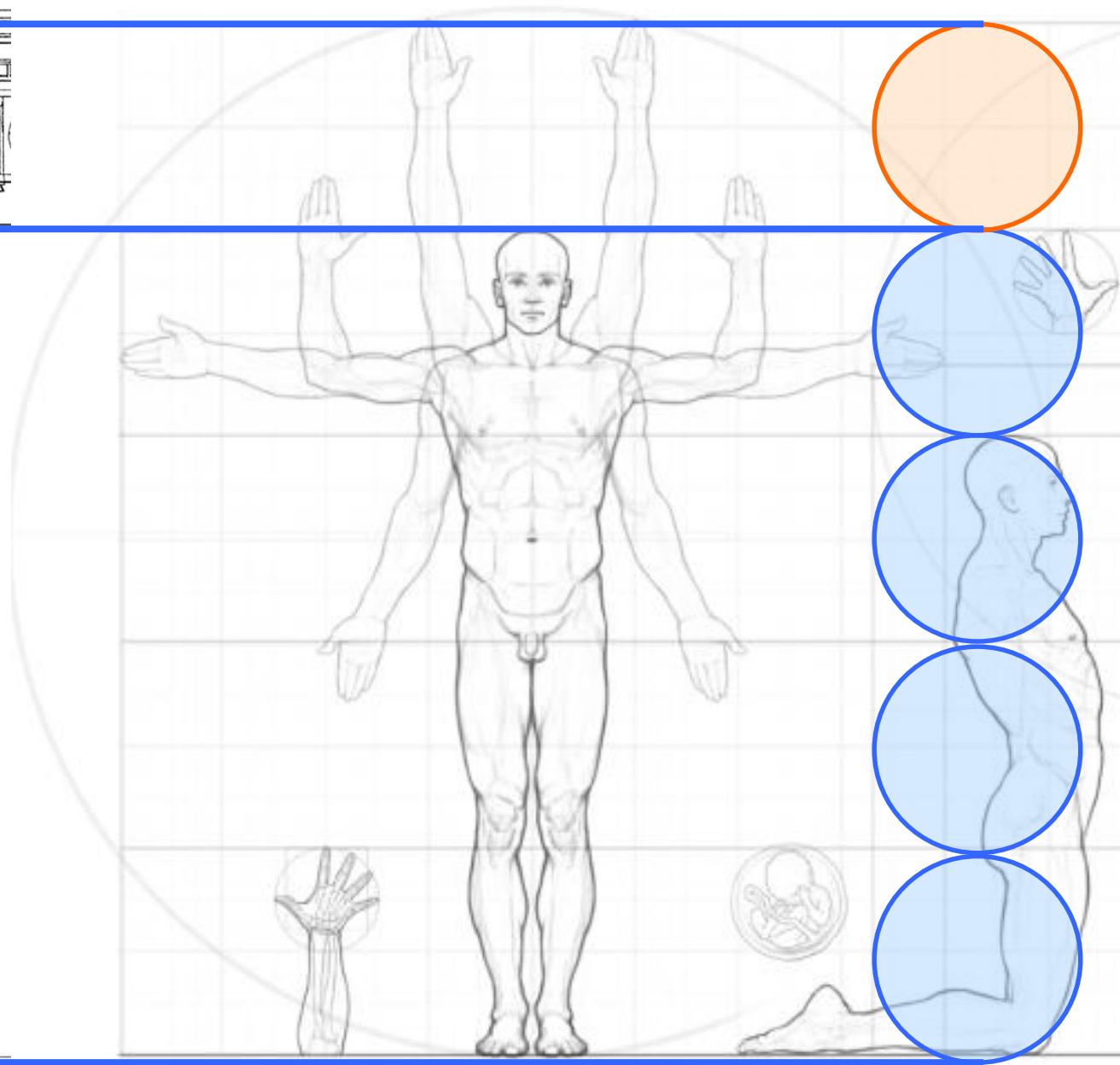
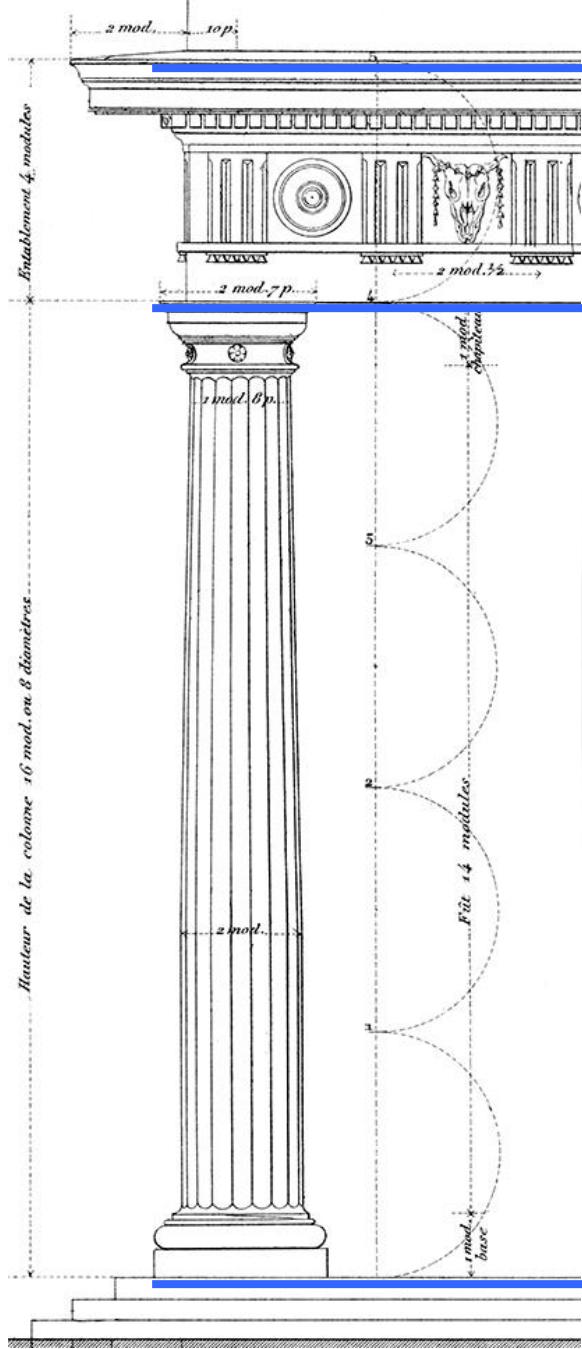


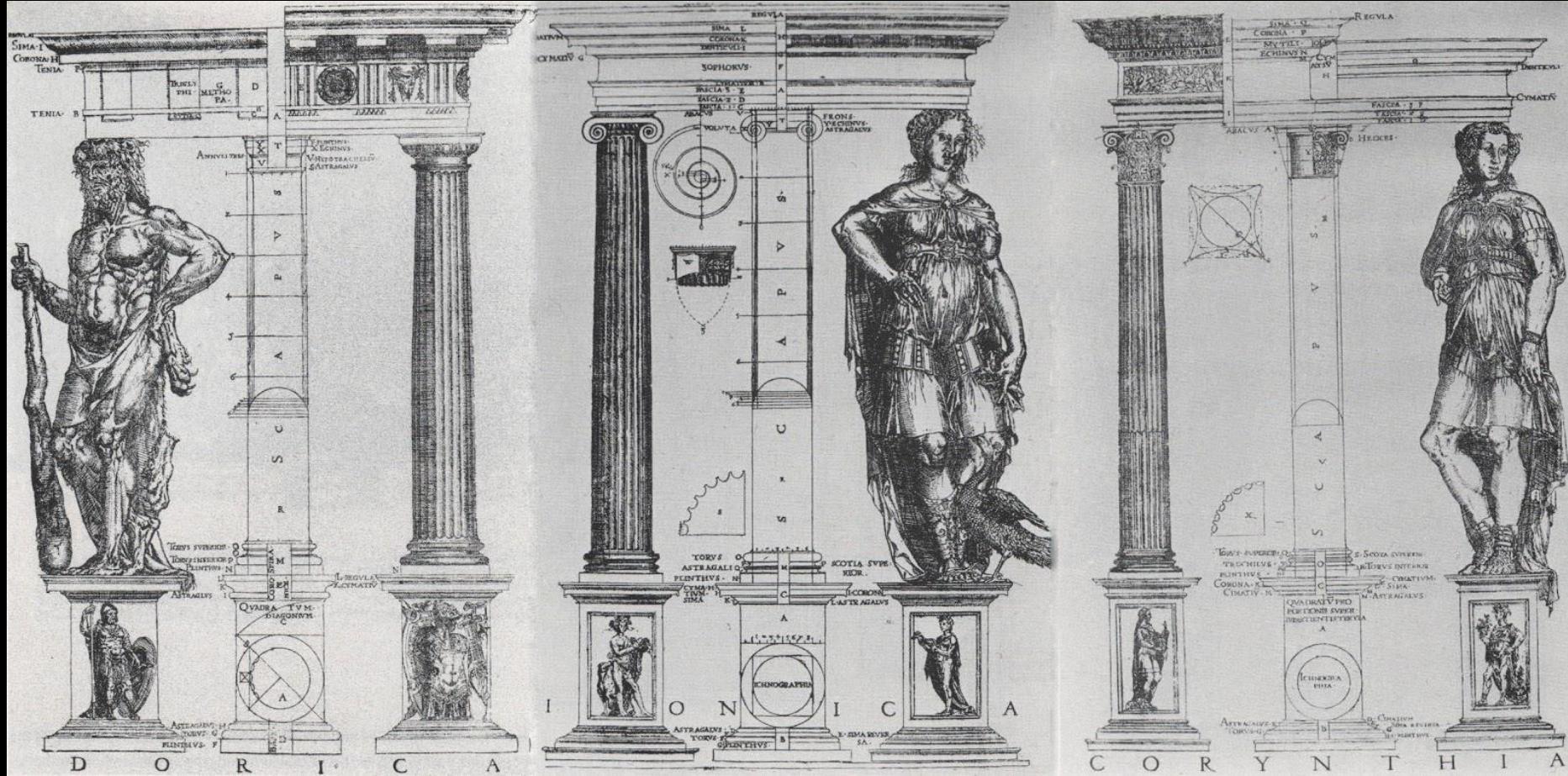


1



BRICKEY CANON (8 HEADS)

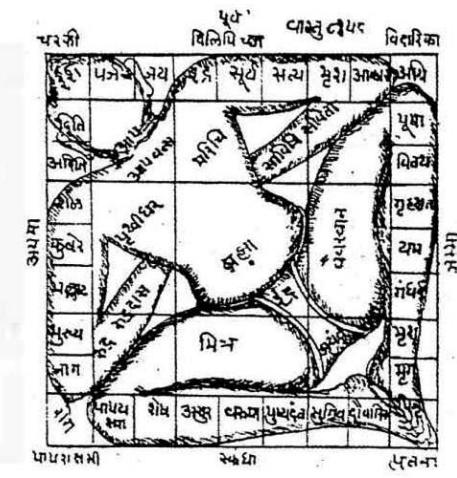
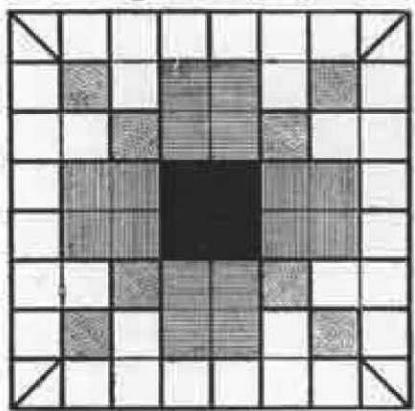
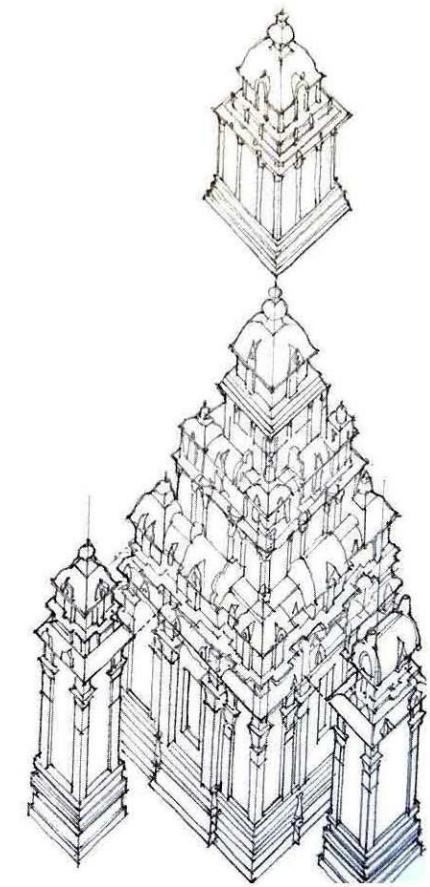
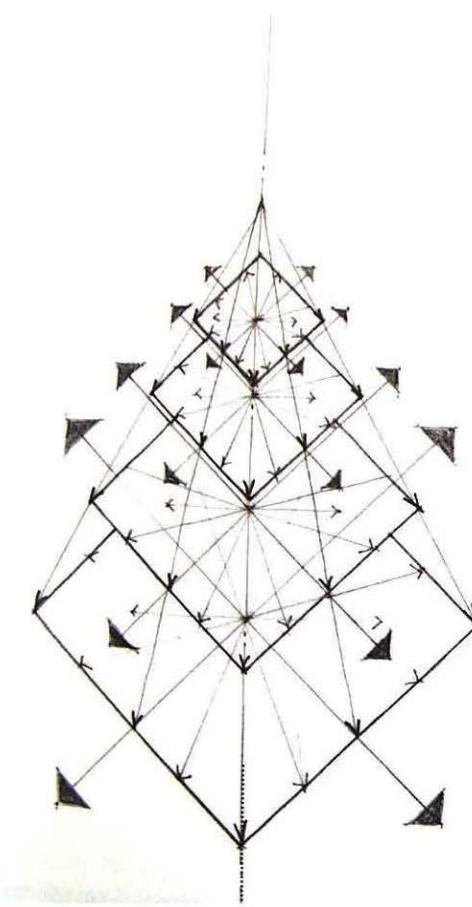




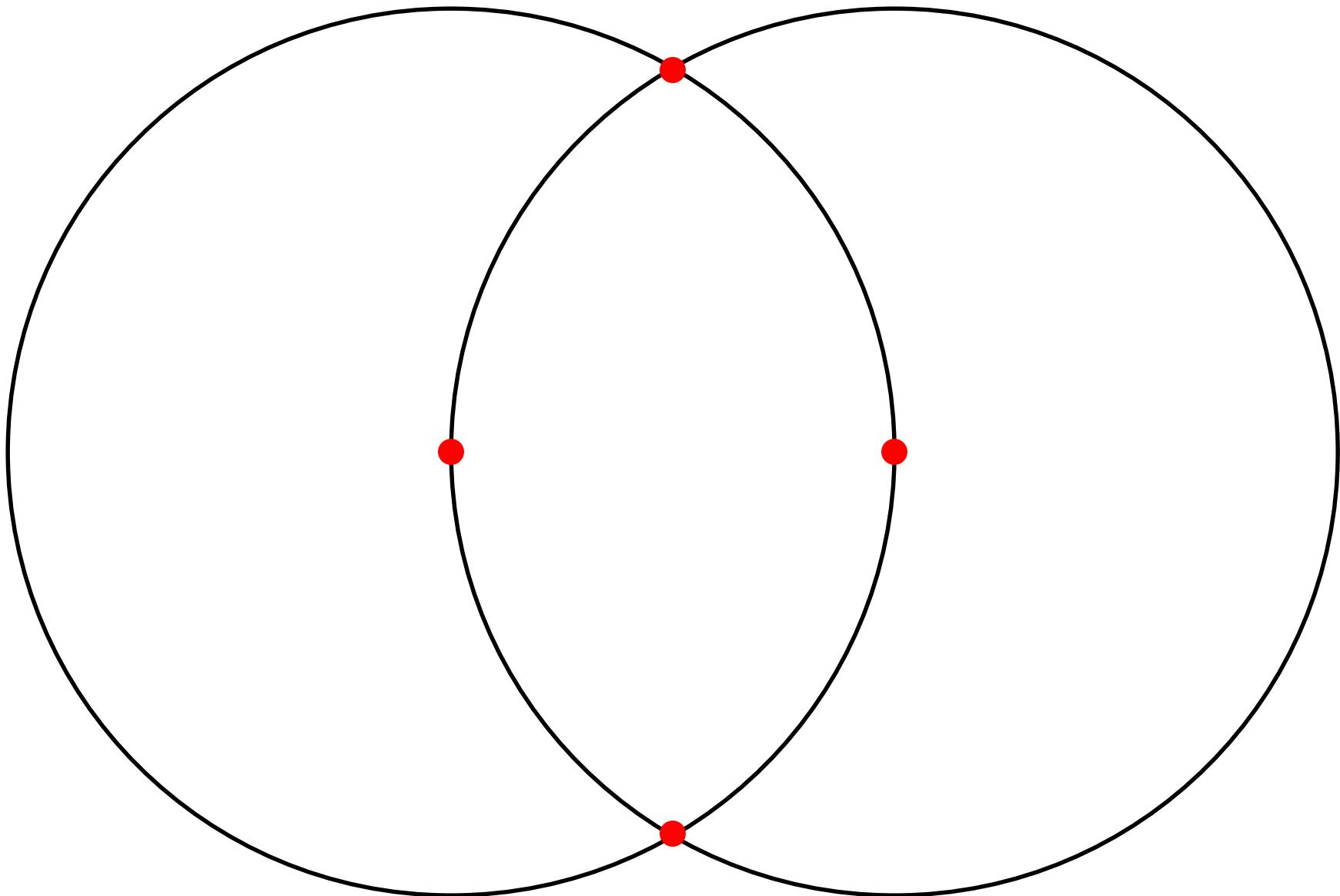


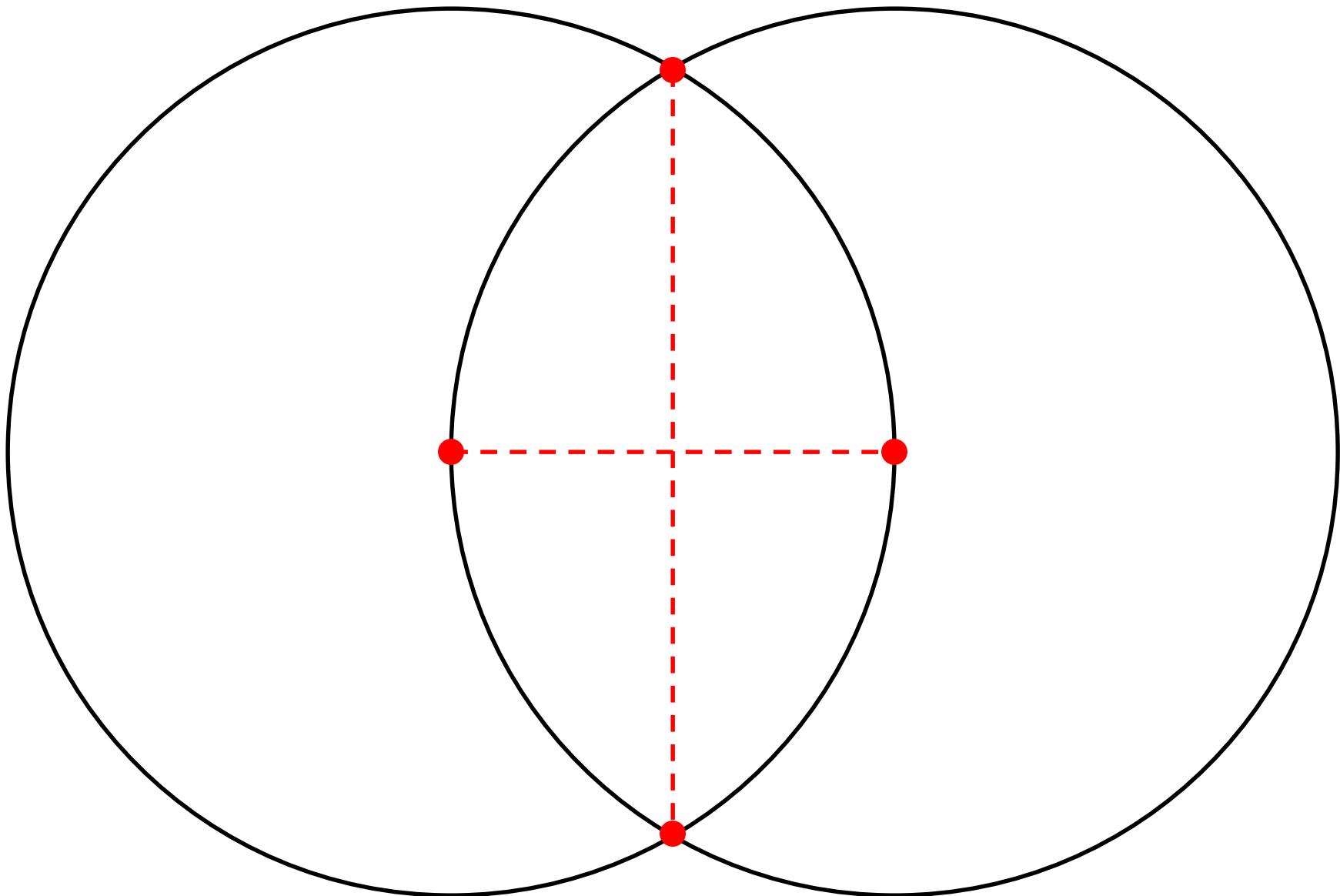


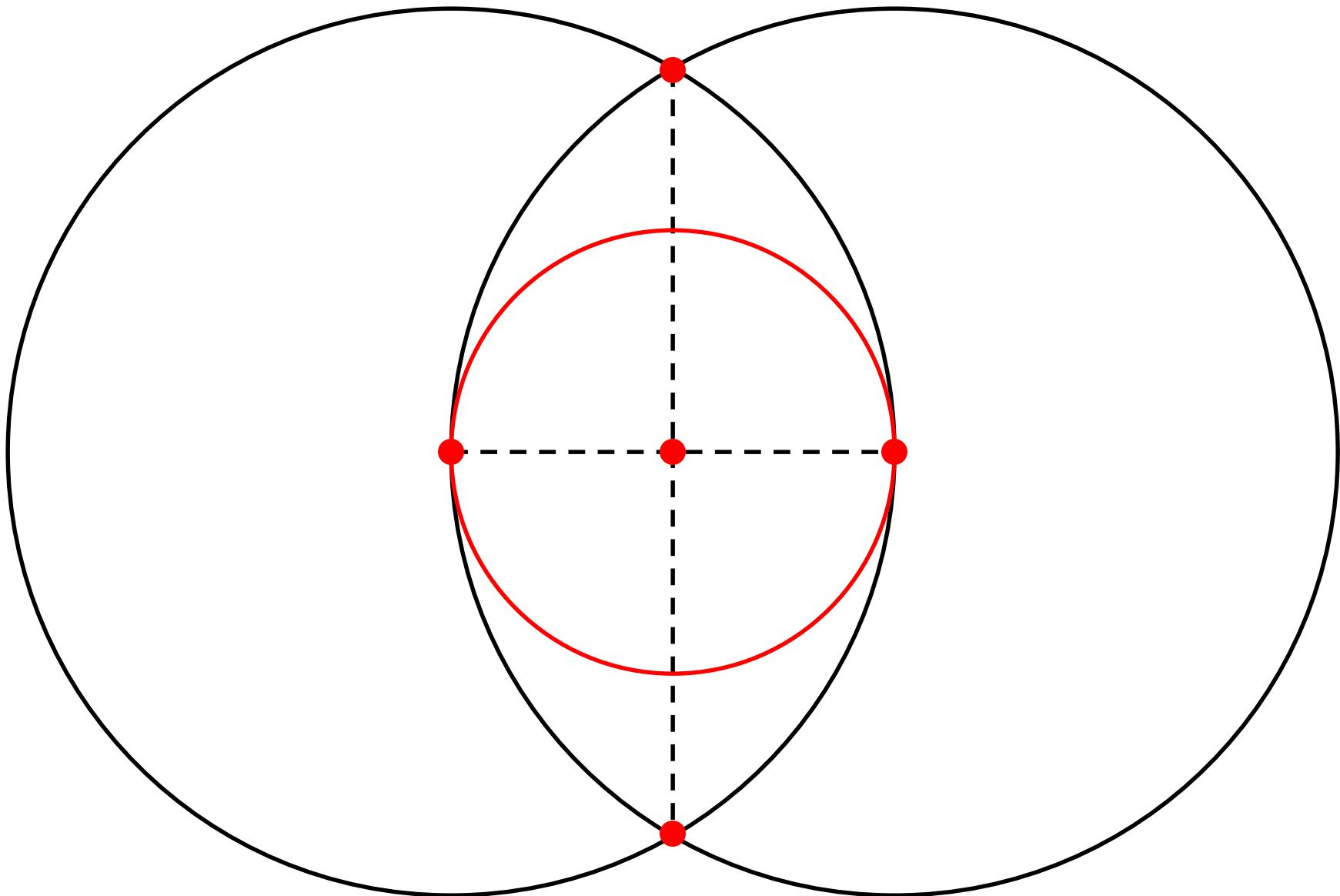


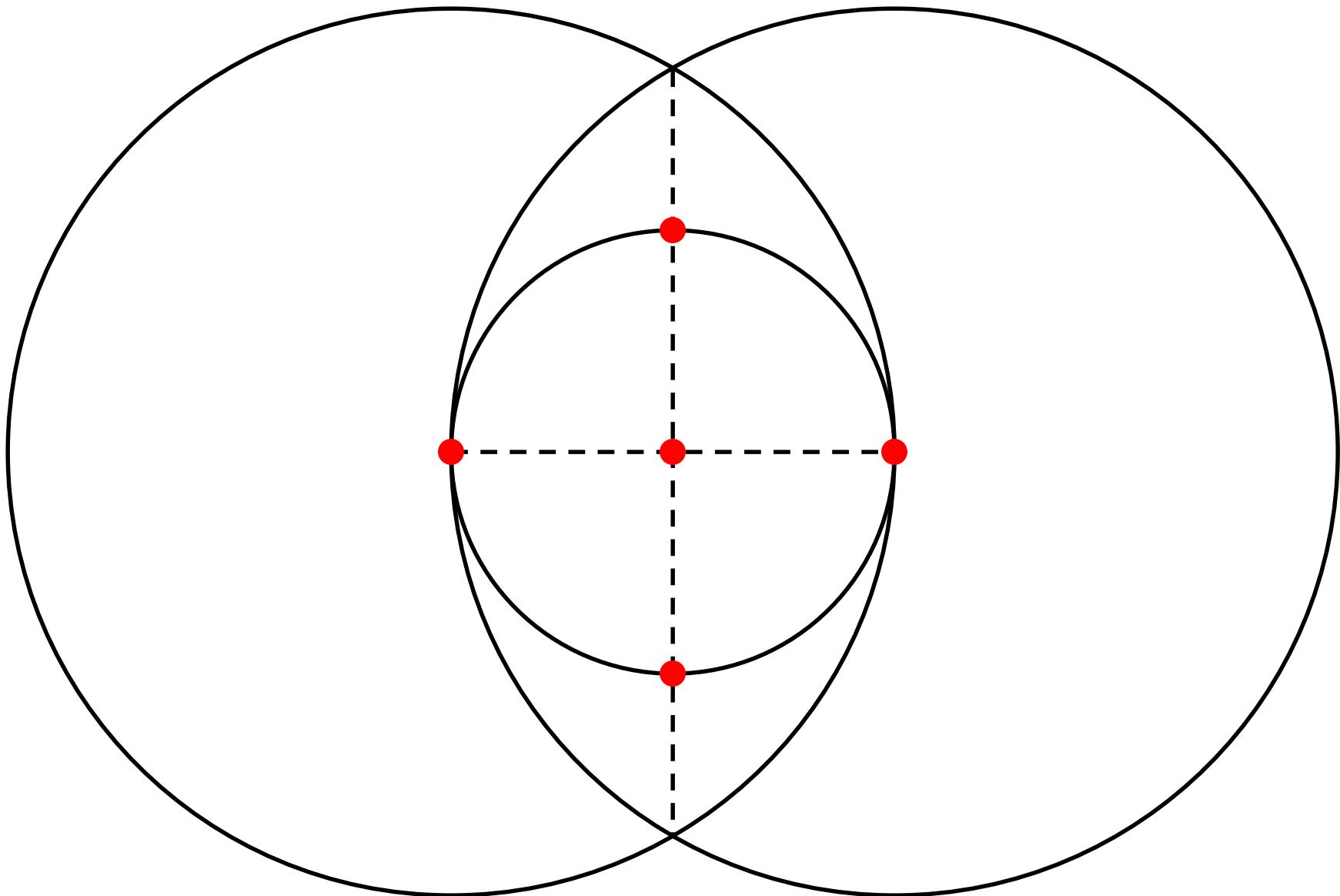


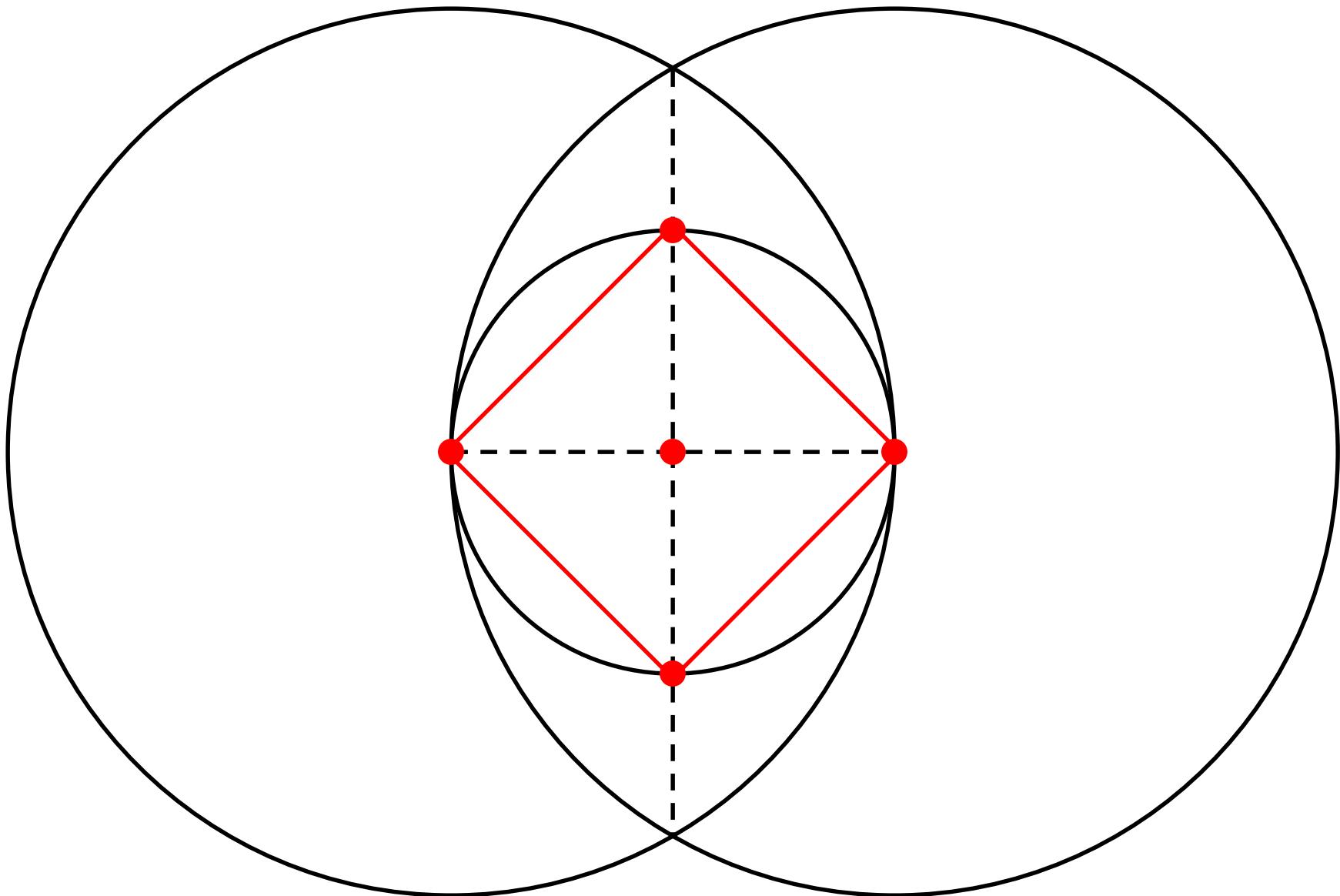
How to Construct the Square







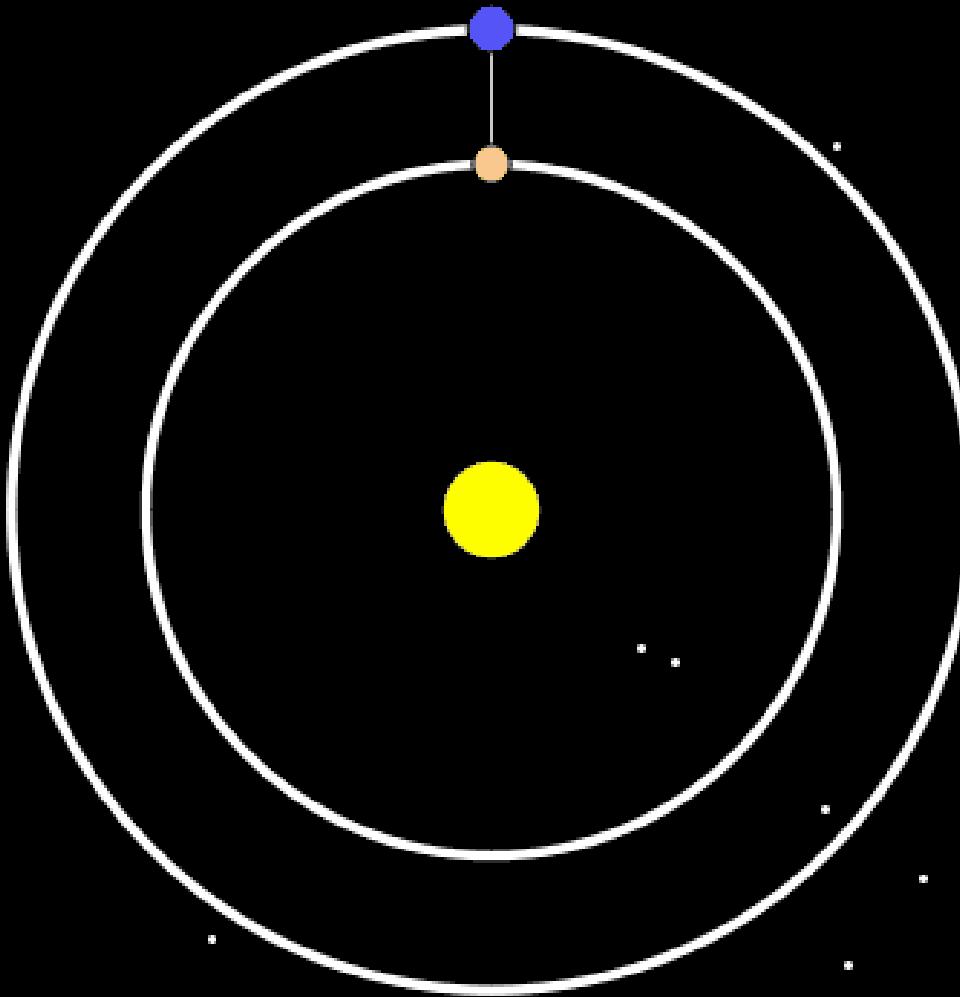


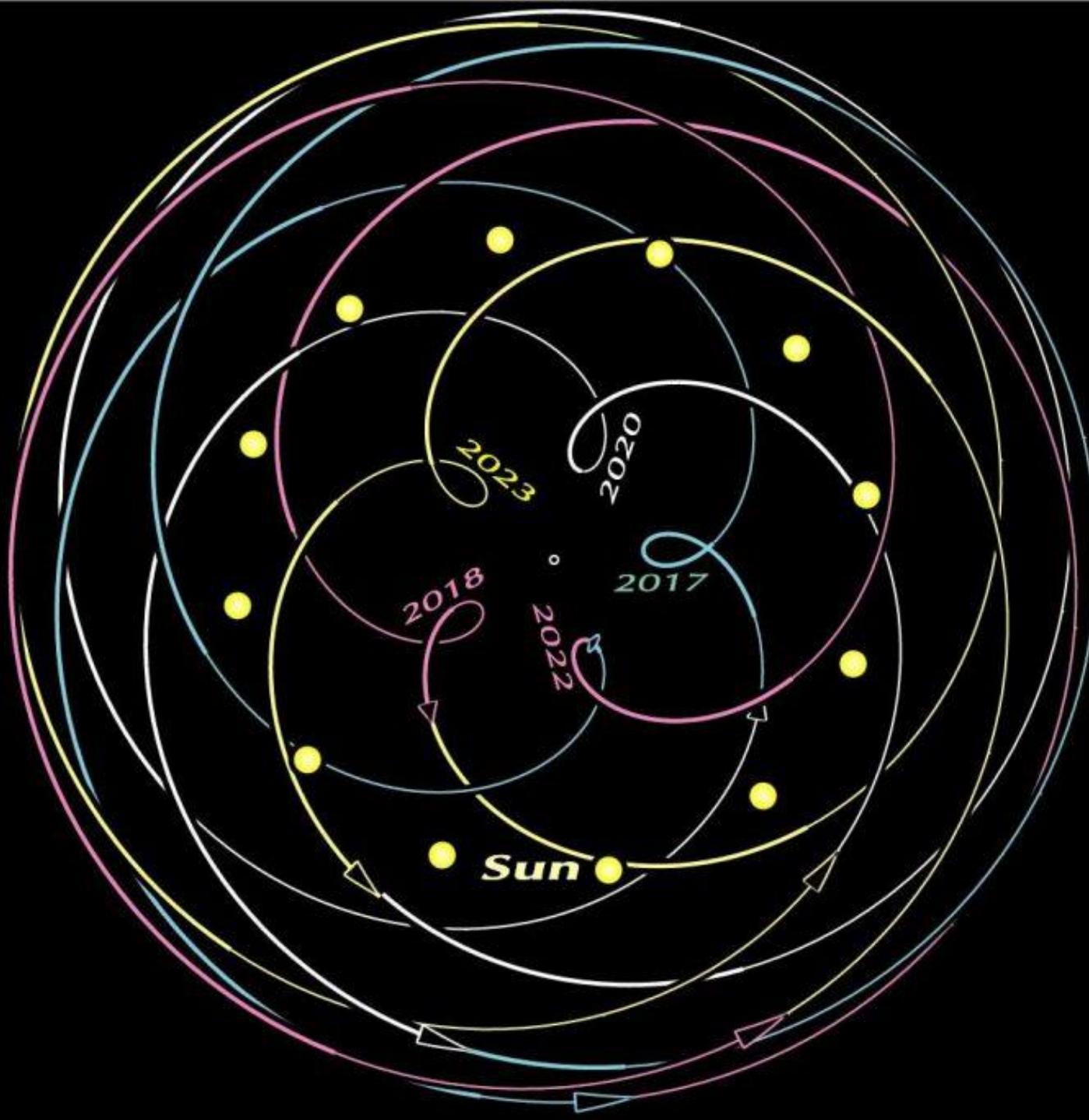


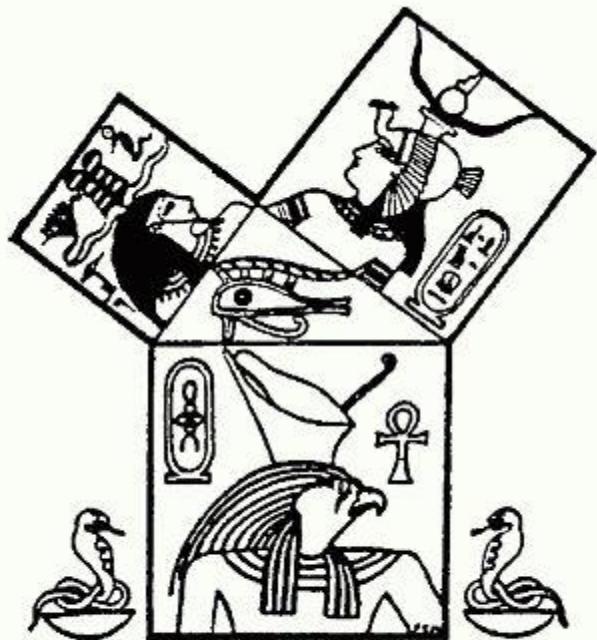
PENTAD

“5”

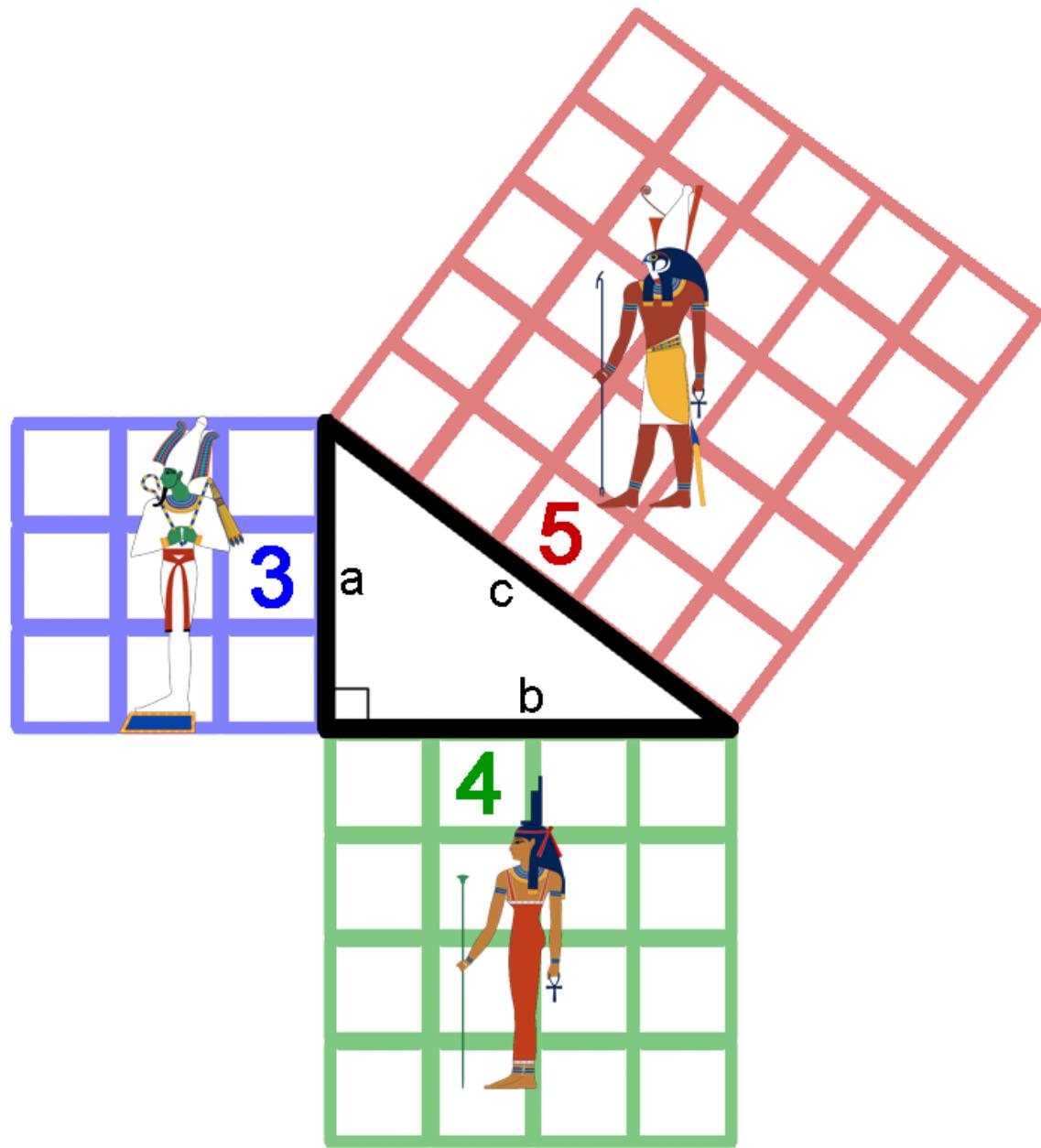




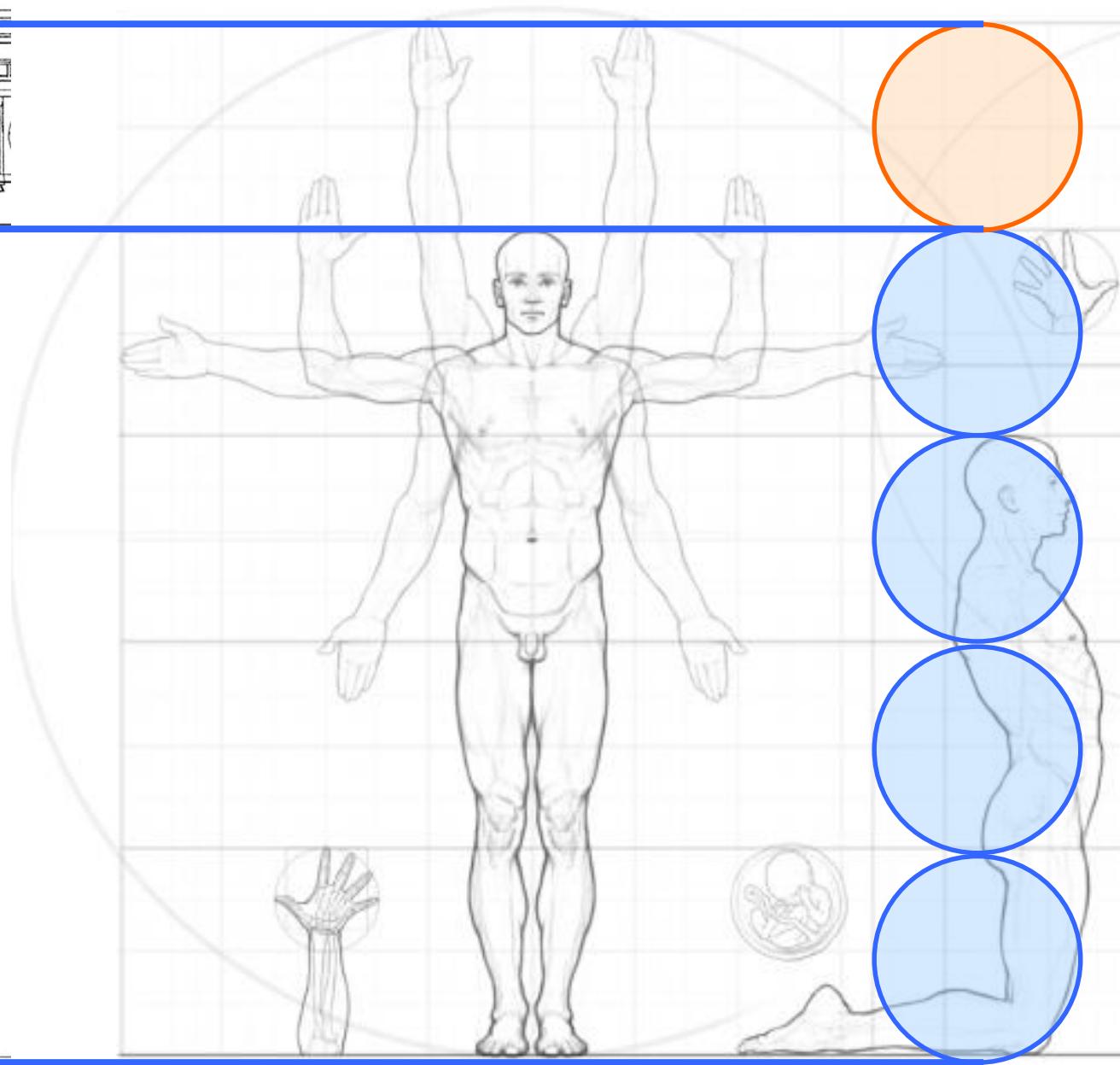
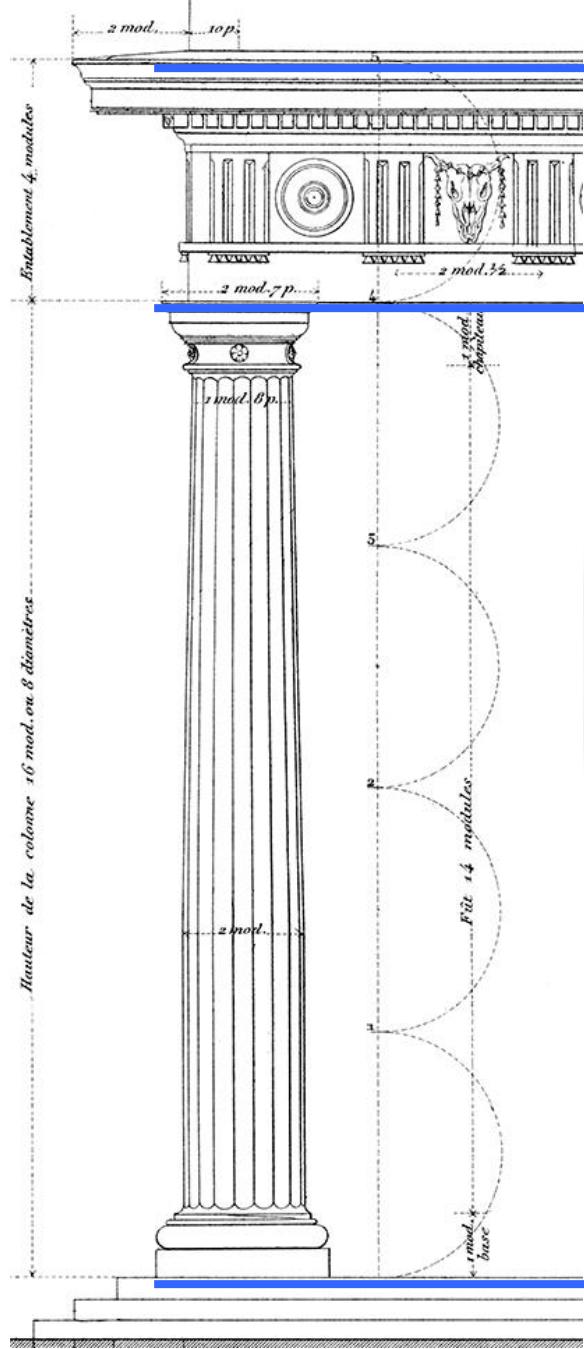


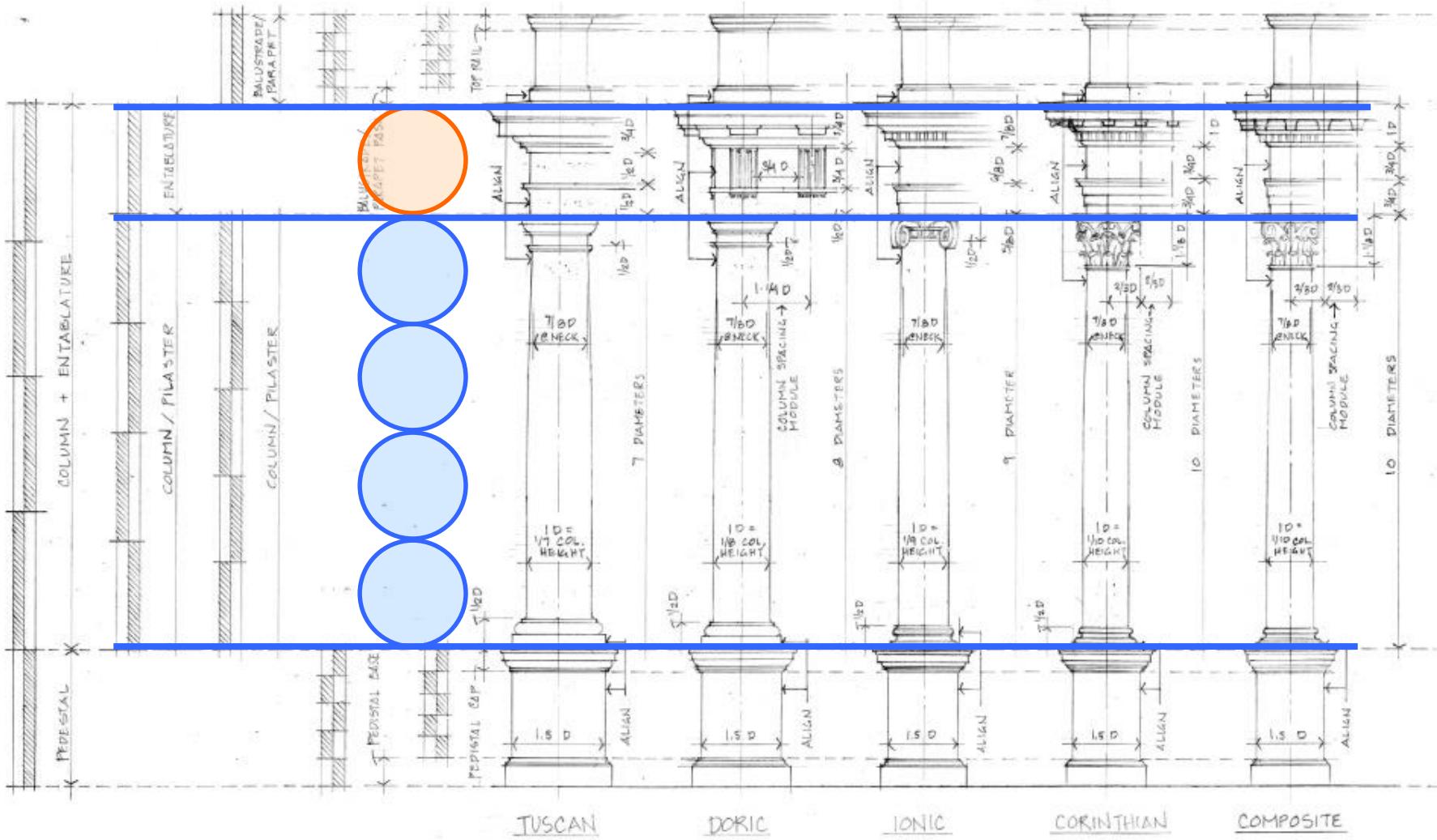


The "Forty-seventh Problem" was among the Ancient Egyptians the symbol of Osiris, Isis and Horus.



BRICKEY CANON (8 HEADS)

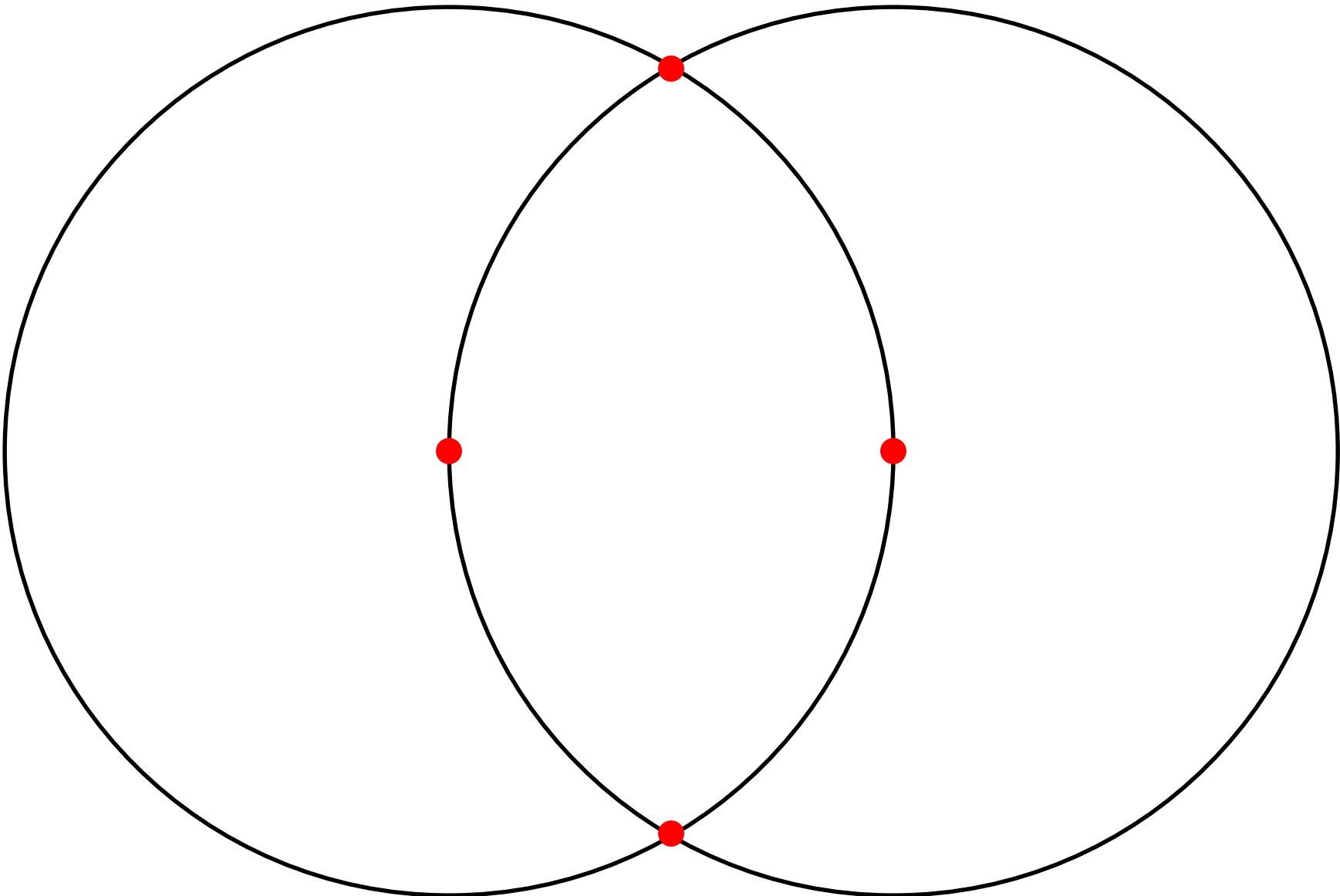


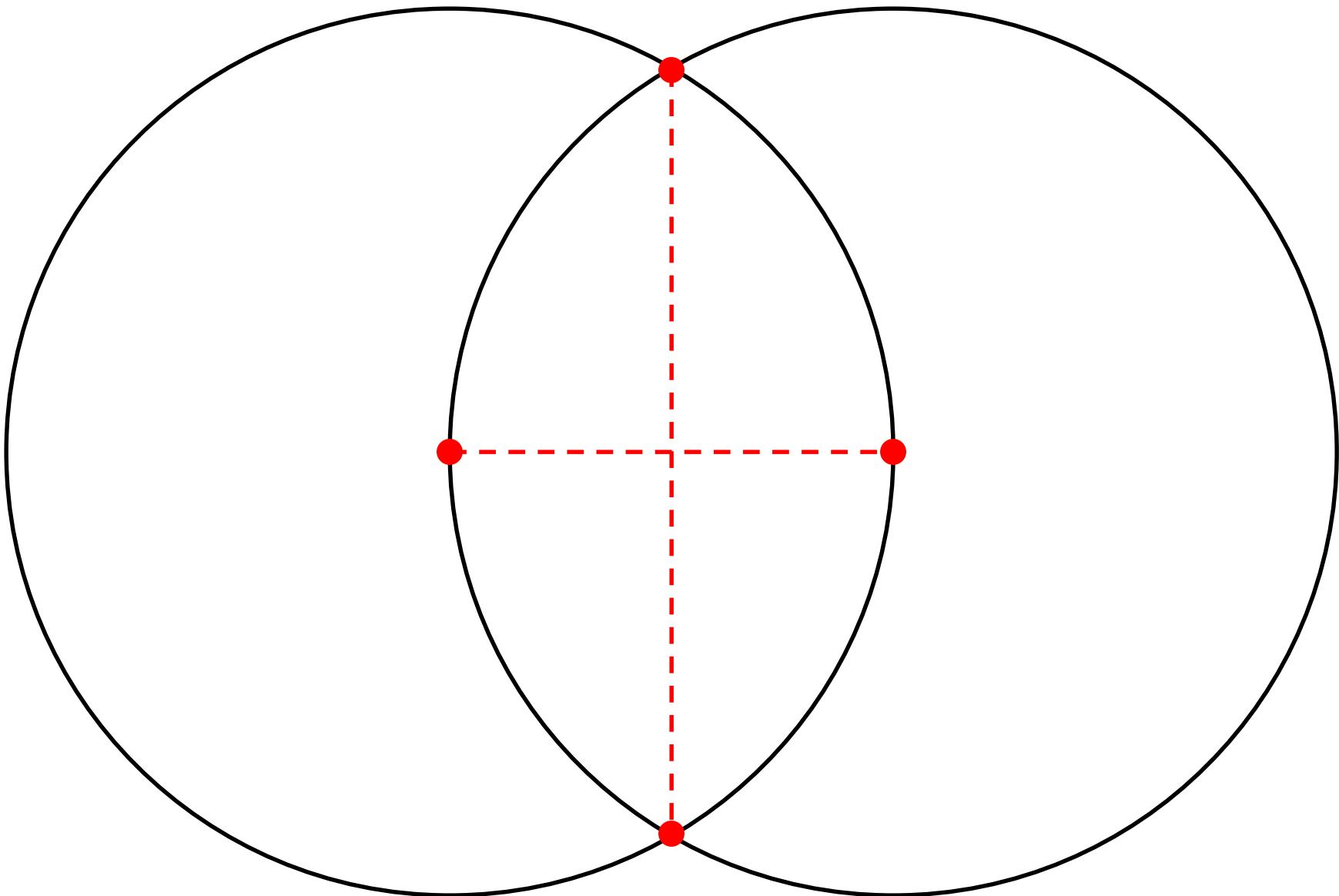


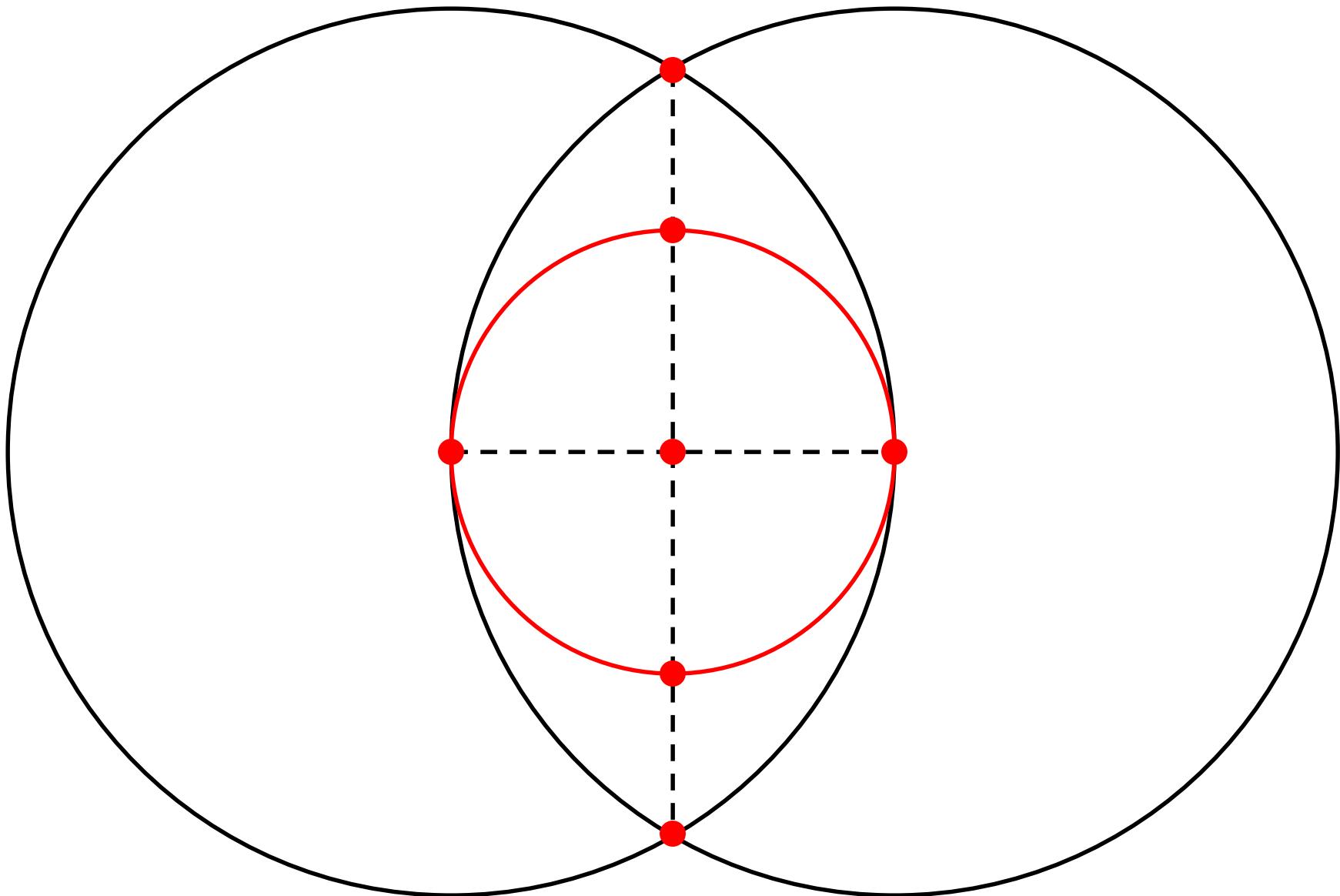
THE CLASSICAL ORDERS of ARCHITECTURE
BY MICHAEL ROUCHELL, ARCHITECT

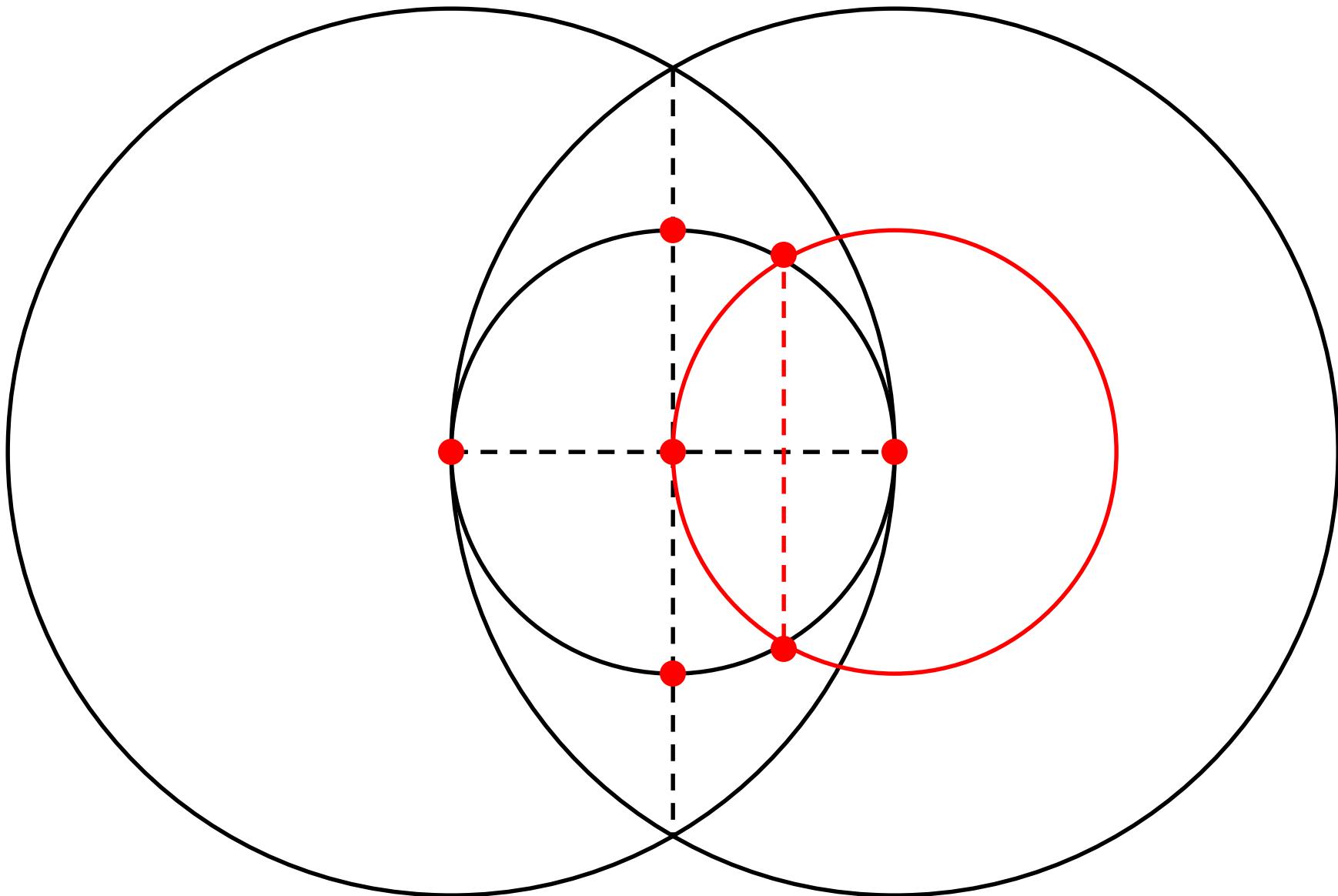


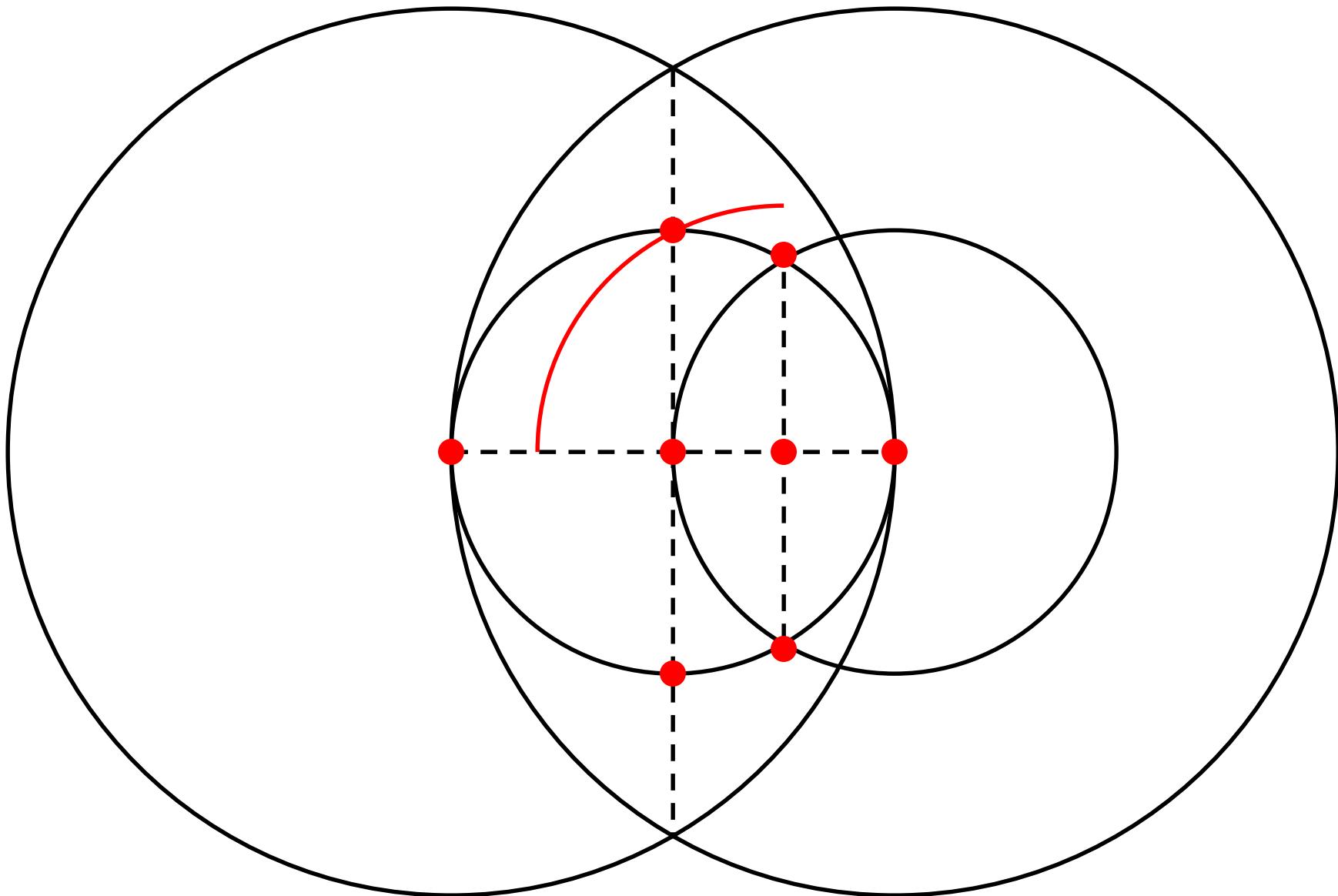
How to Construct the Pentagon

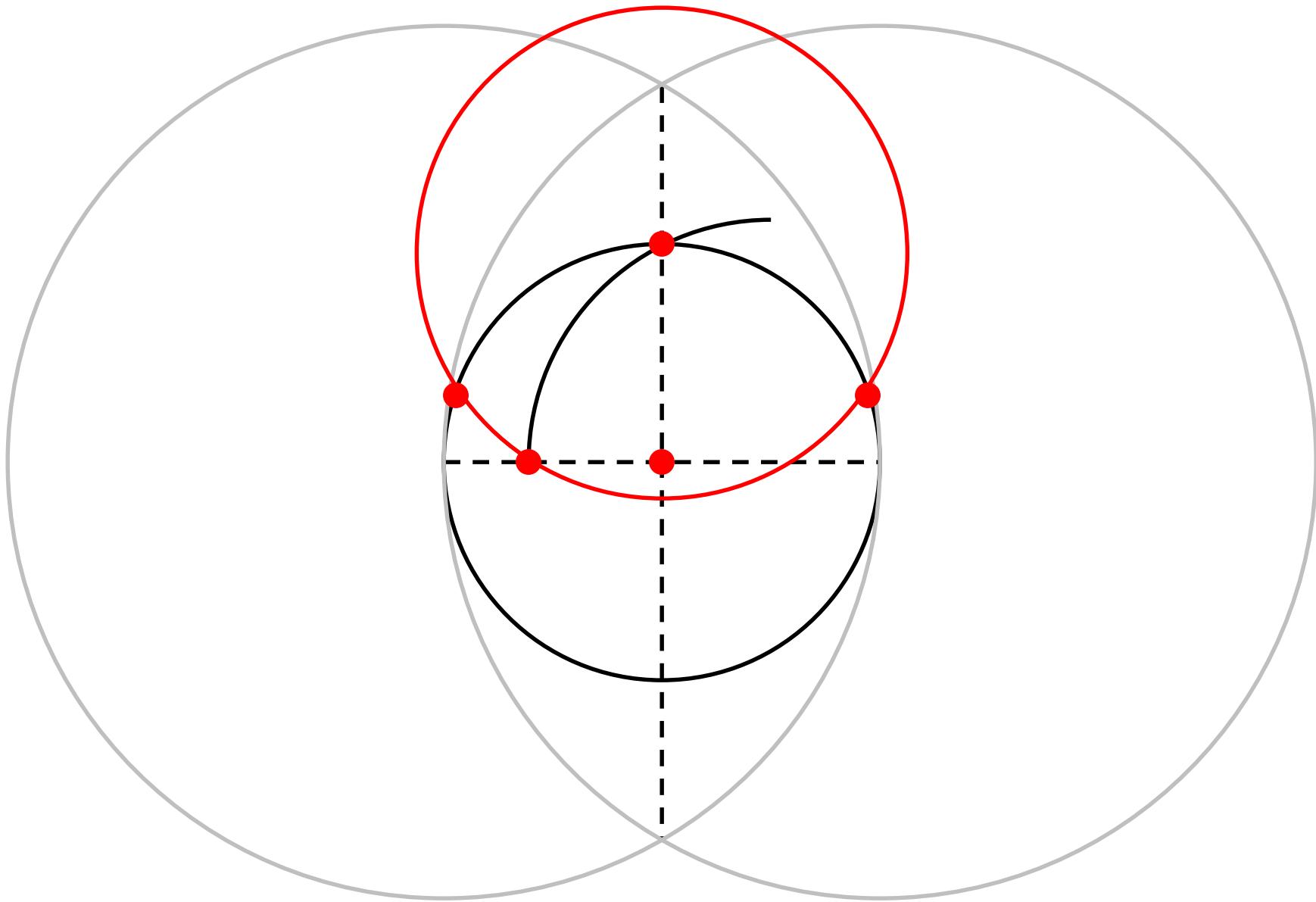


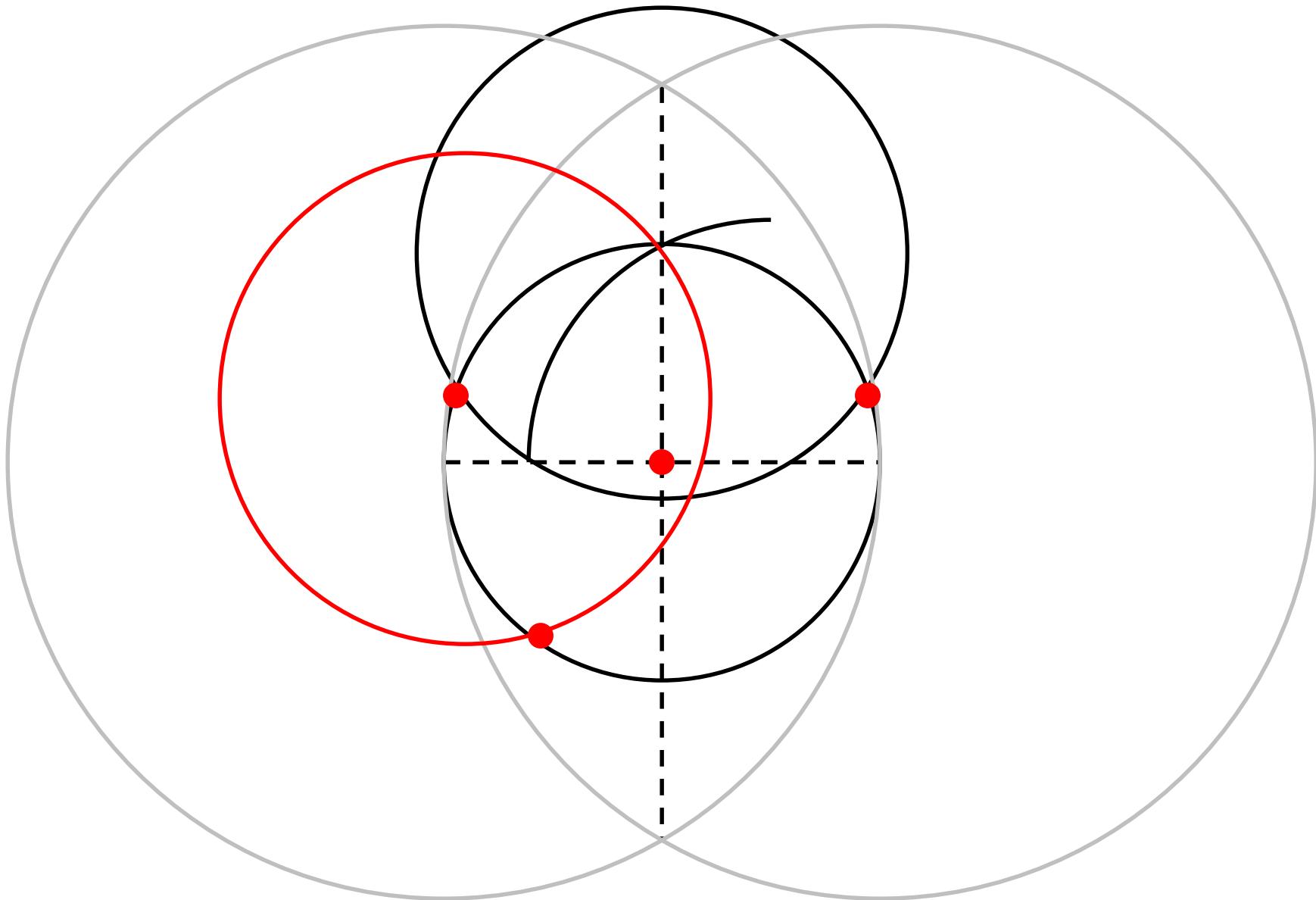


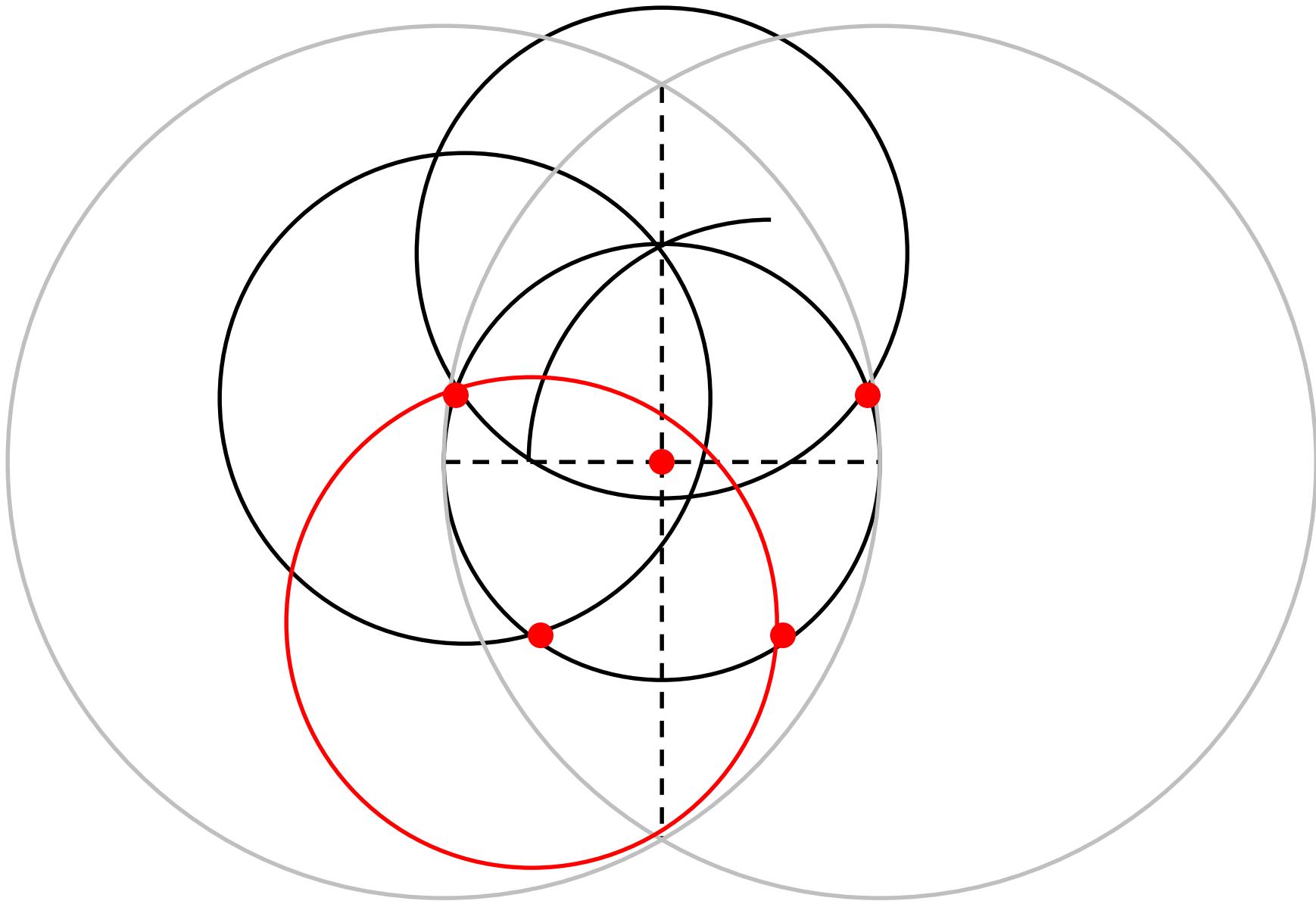


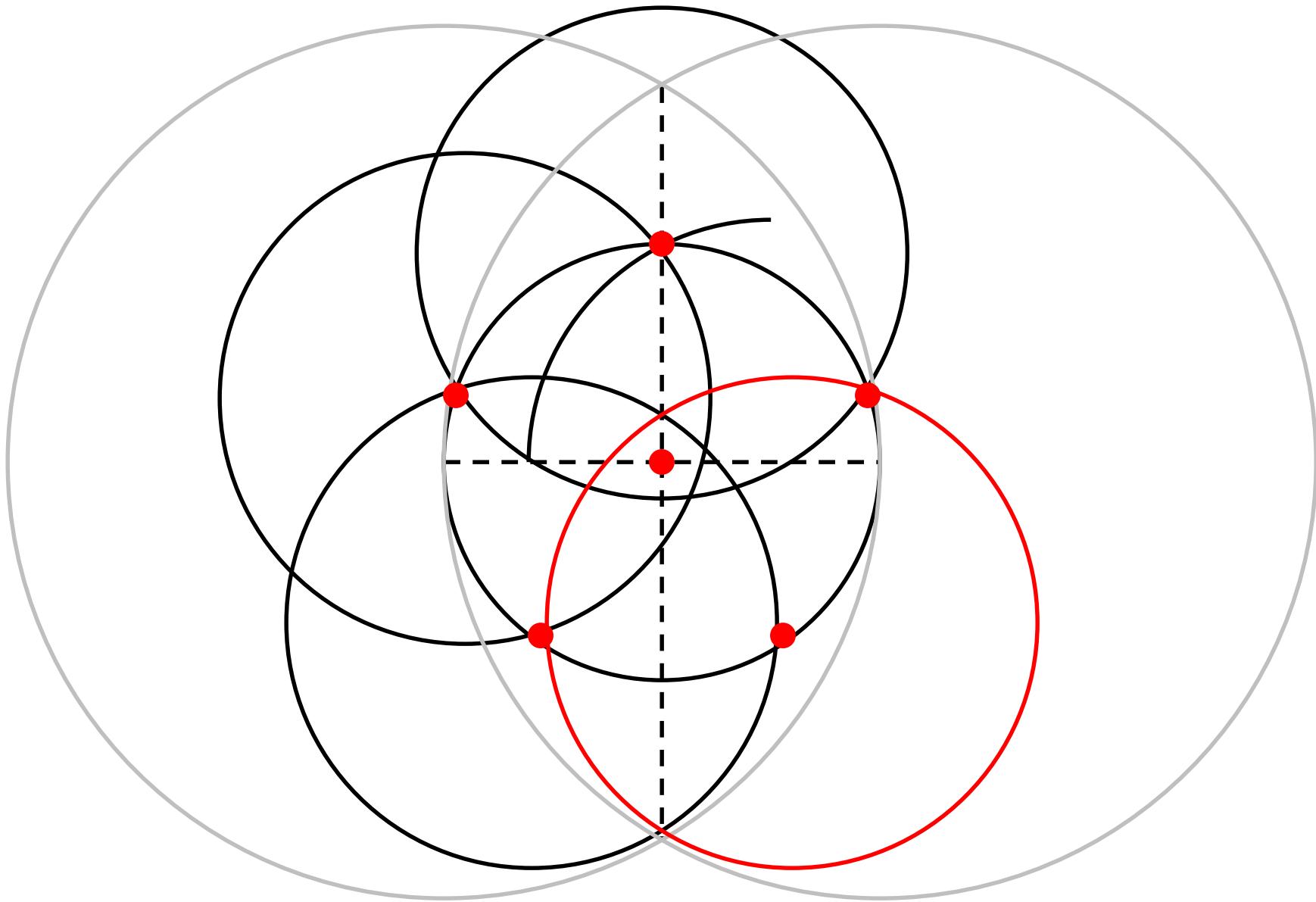


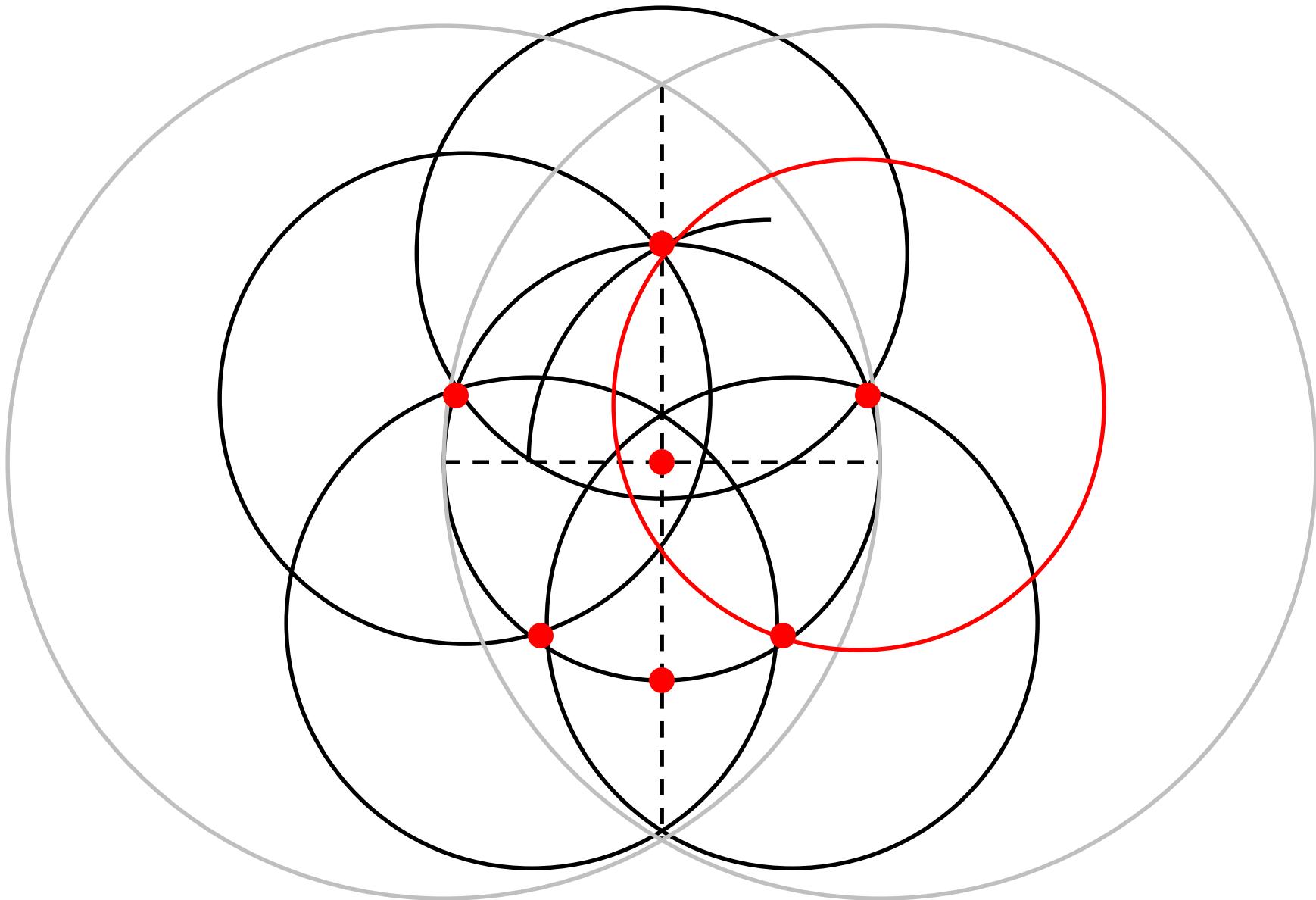


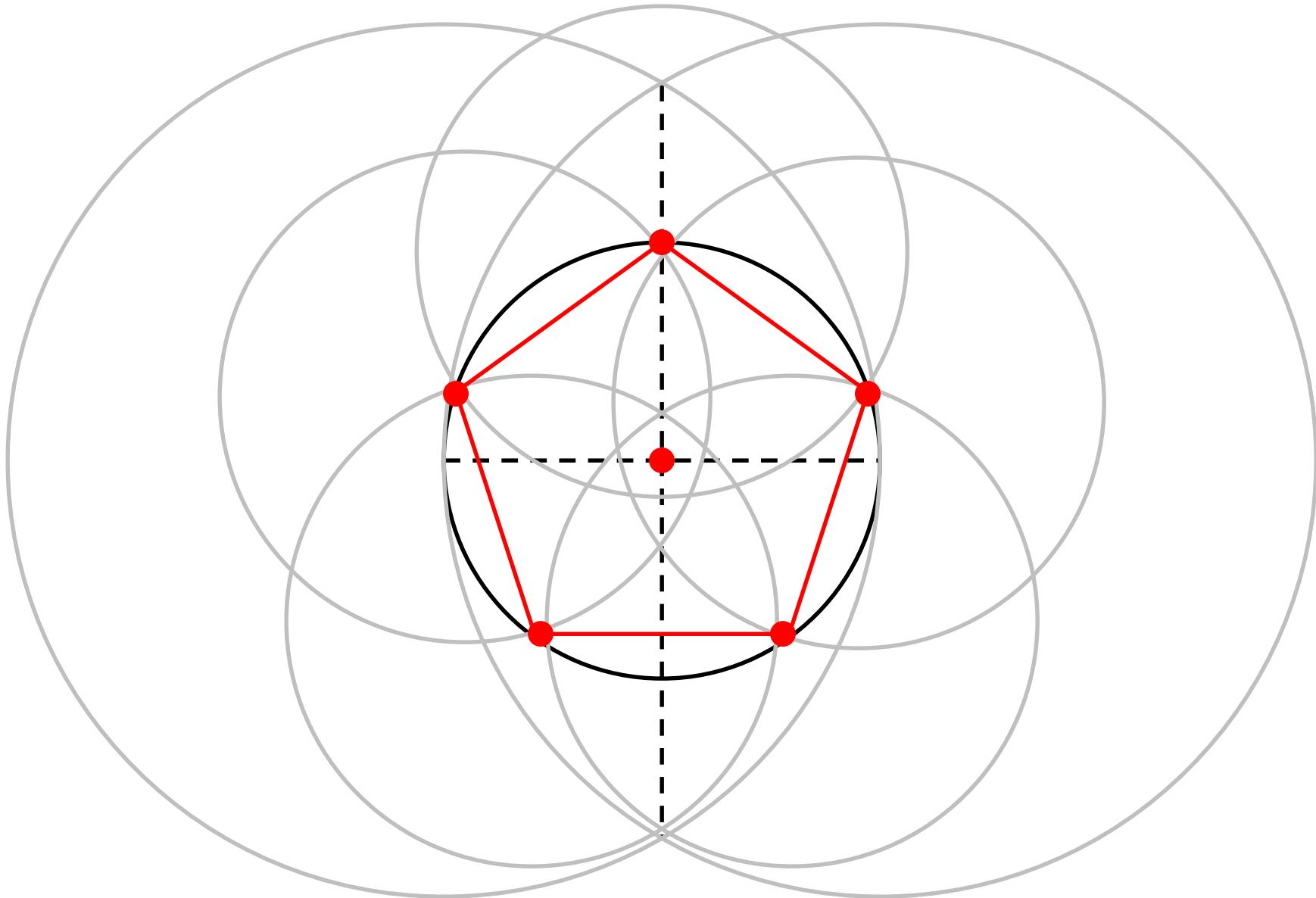






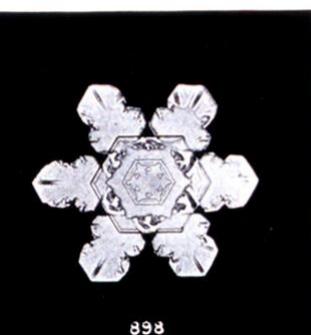
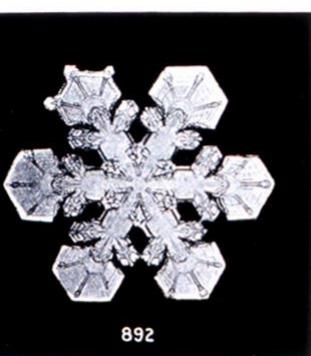
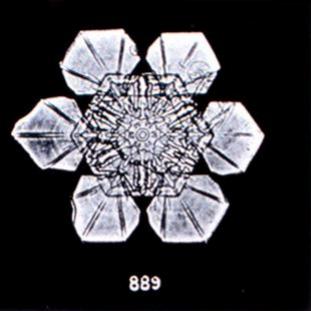




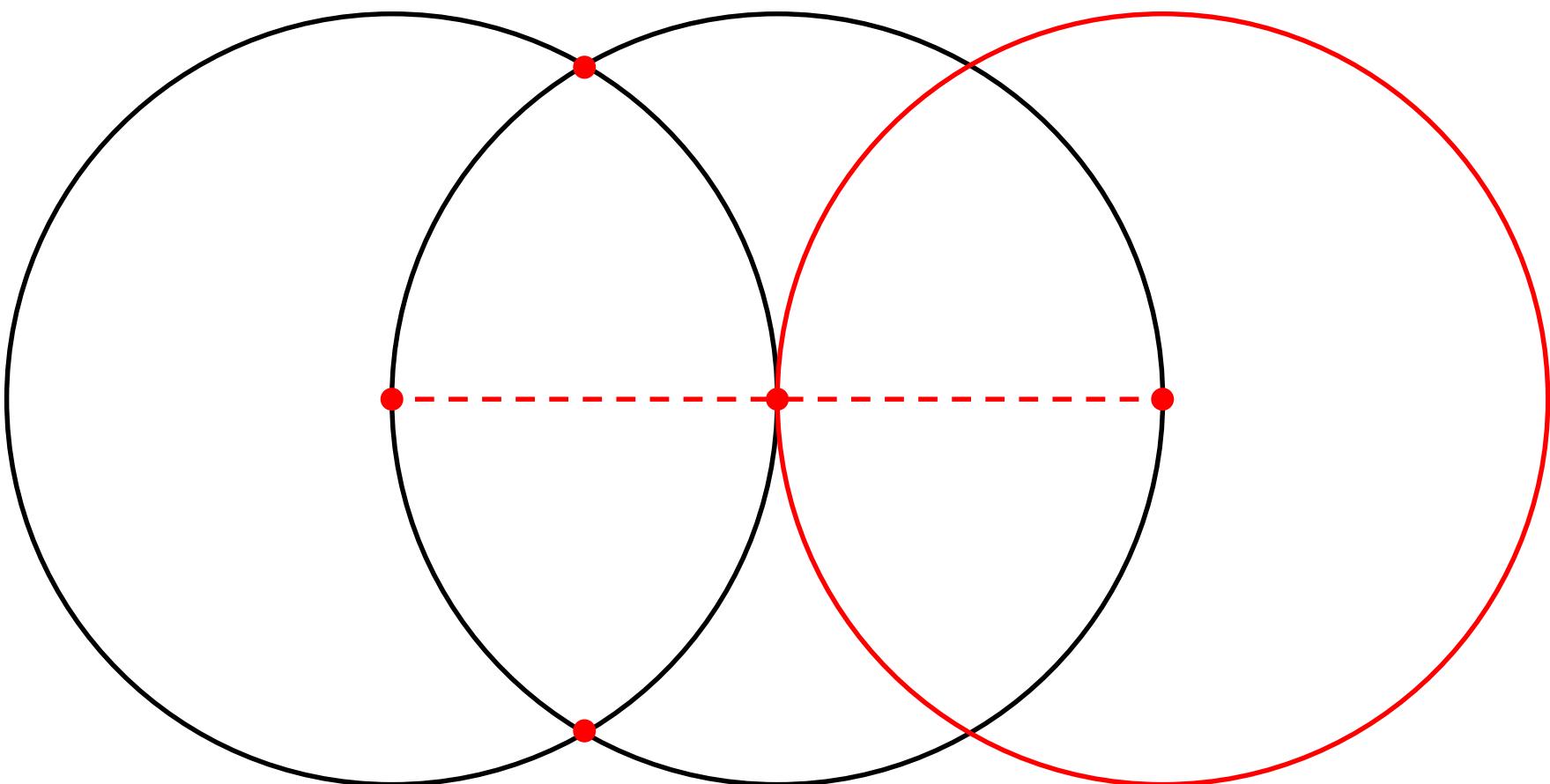


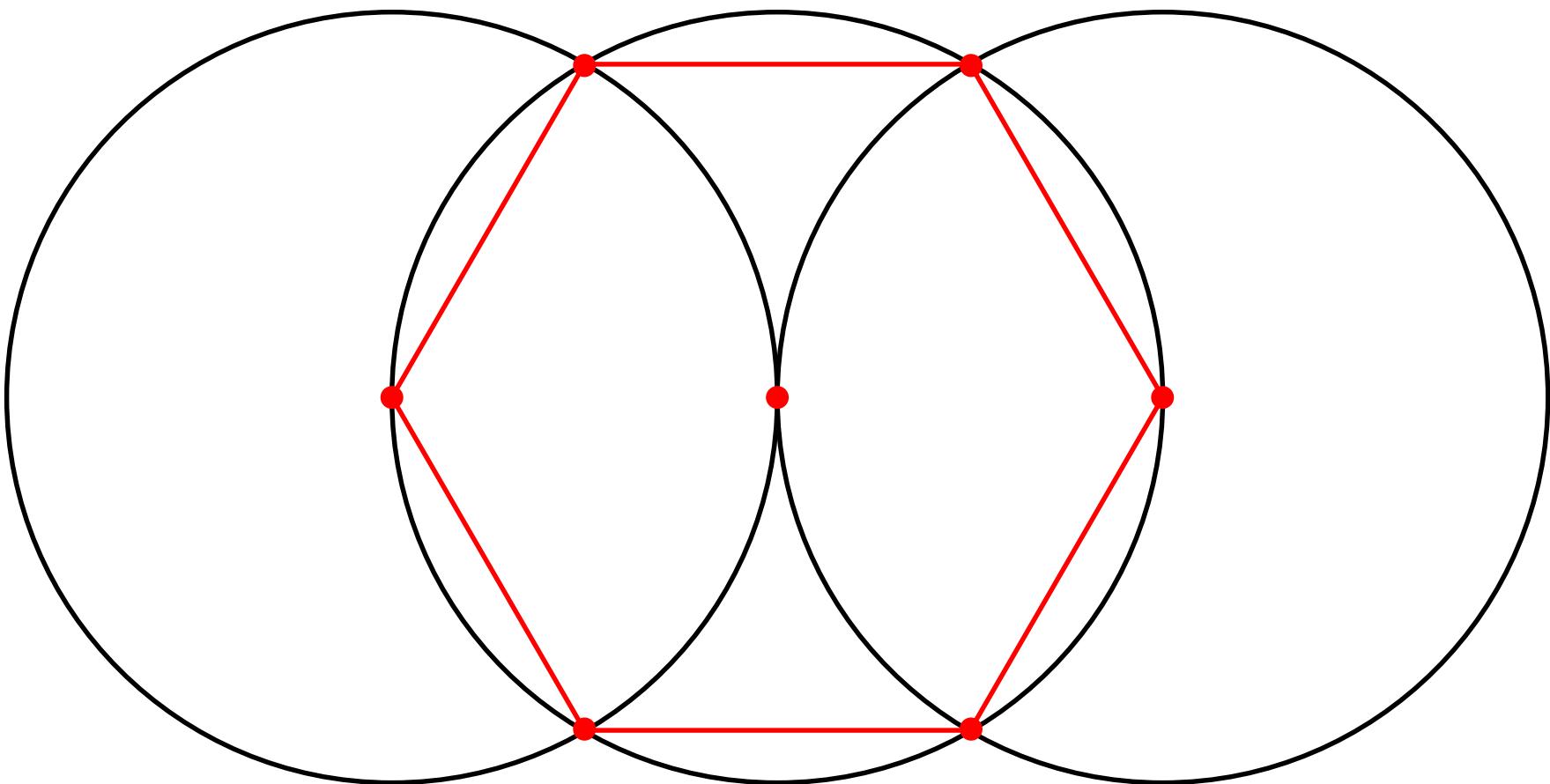
HEXAD

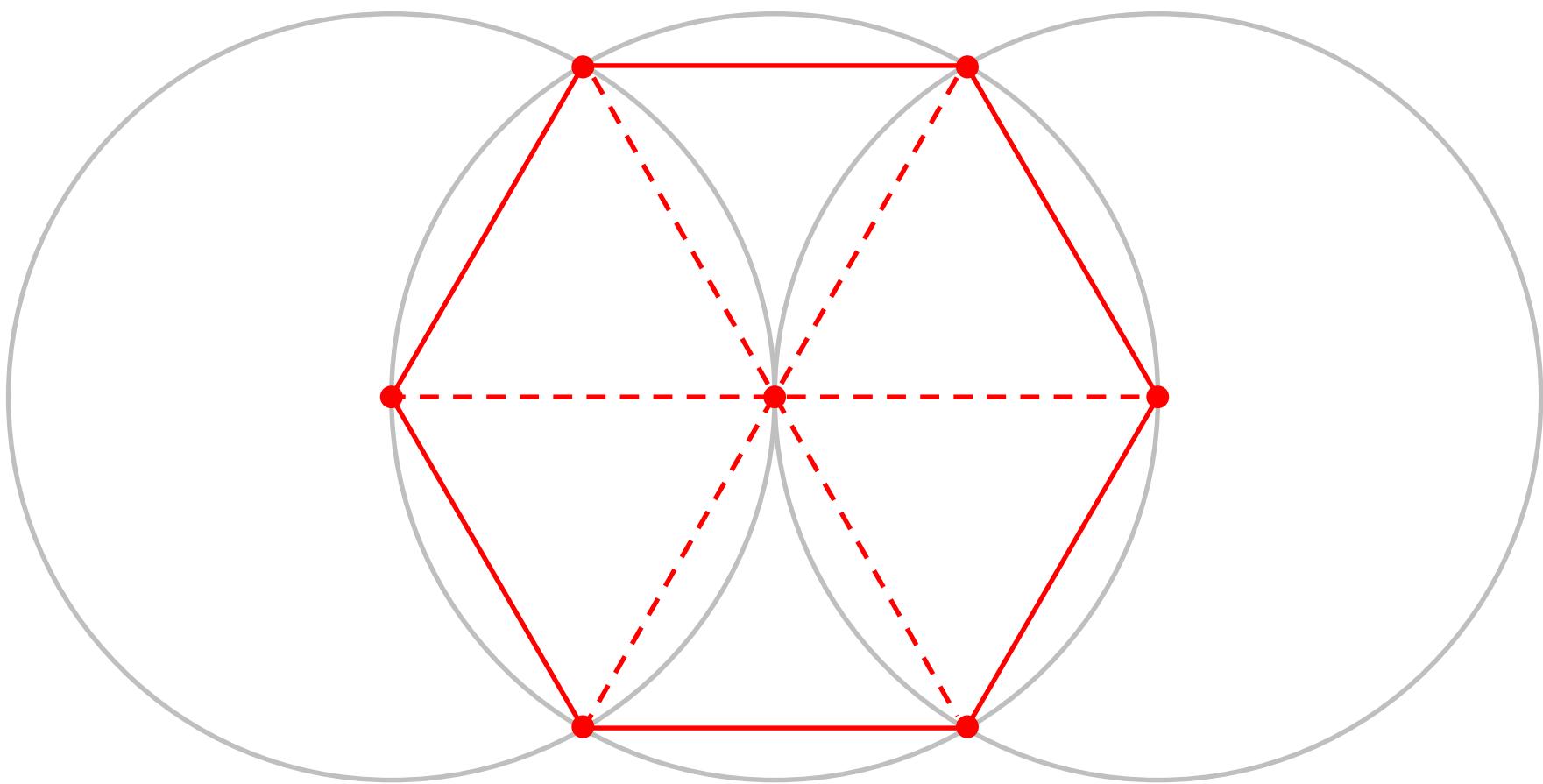
“6”

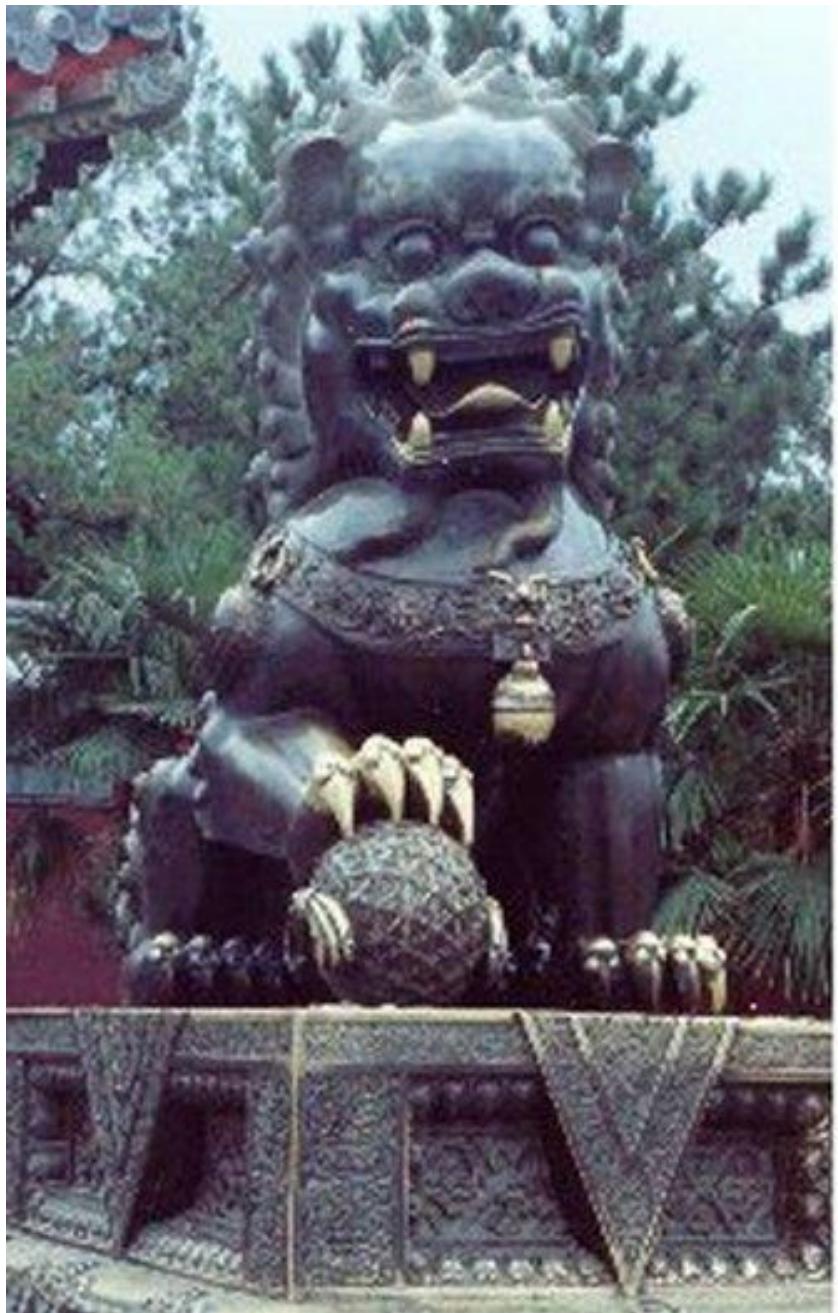


How to Construct the Hexagon

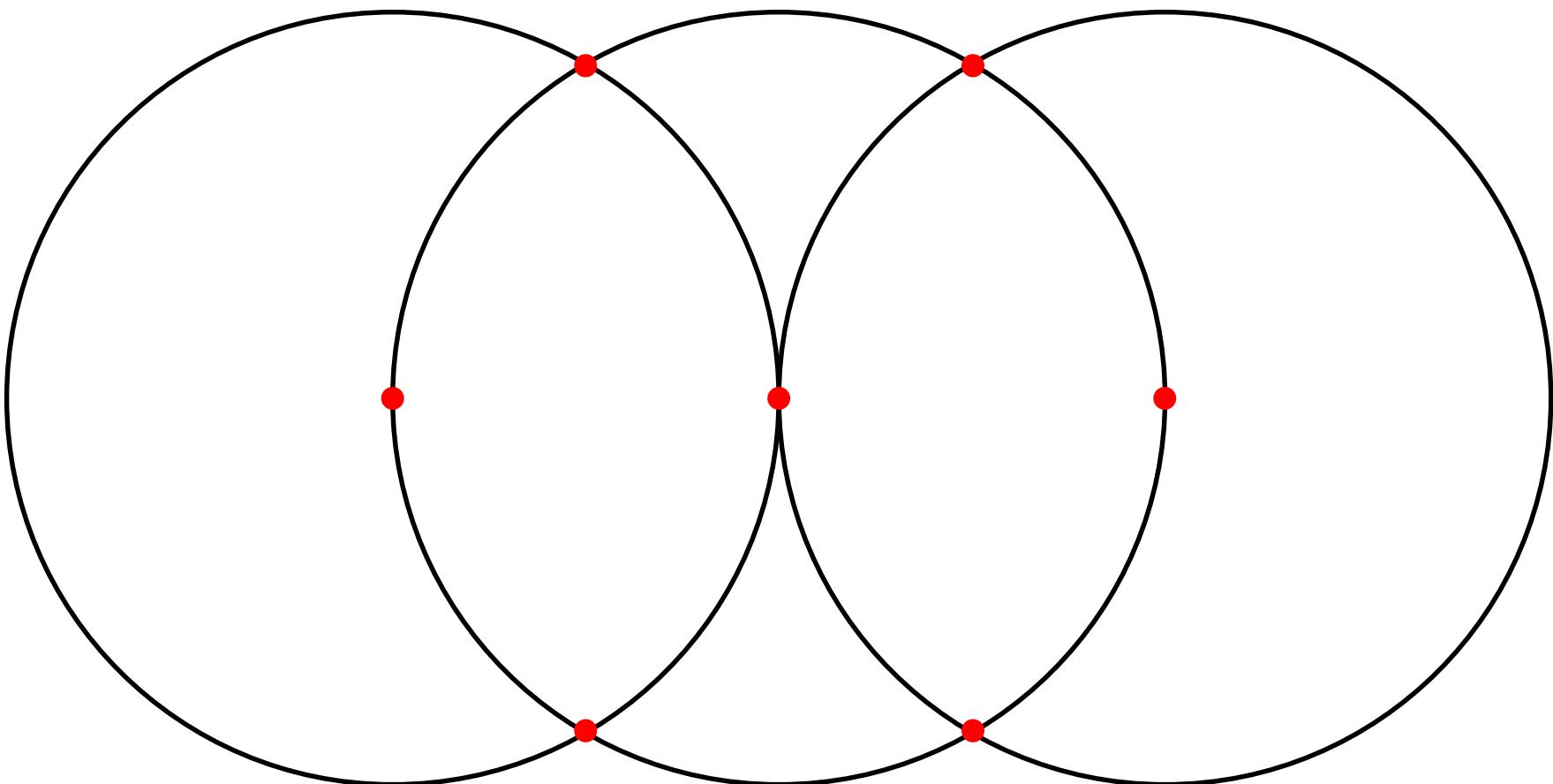


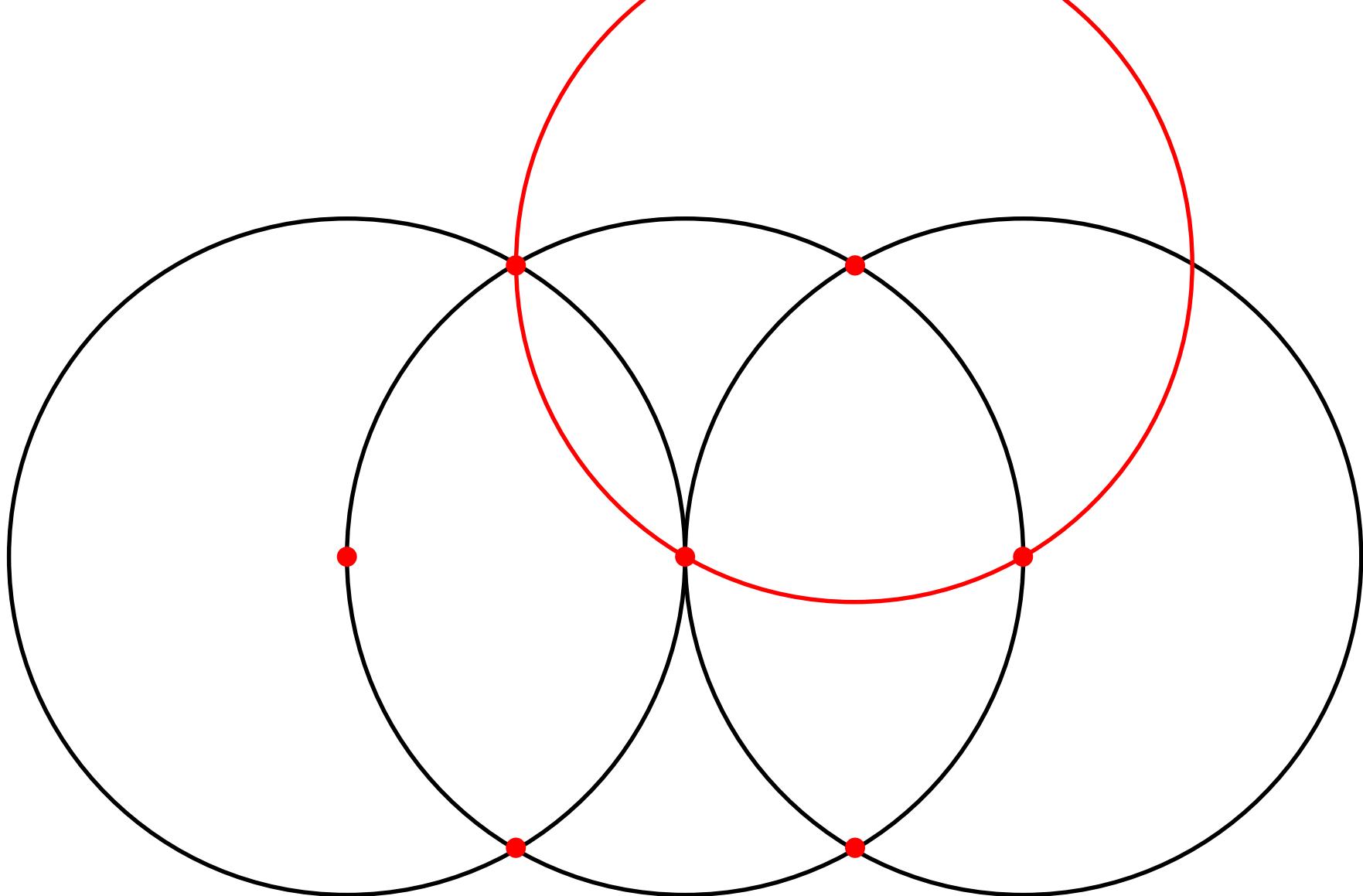


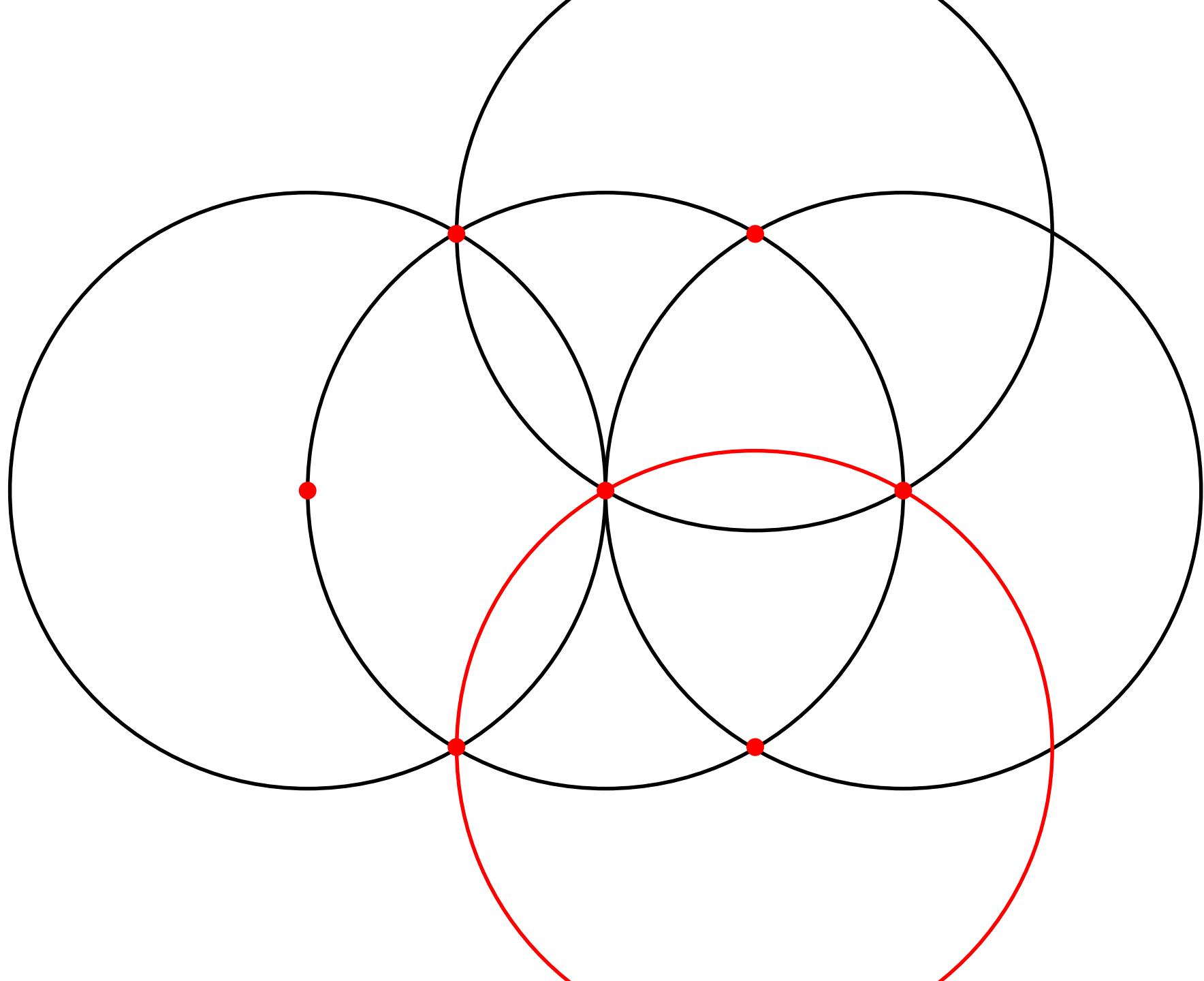


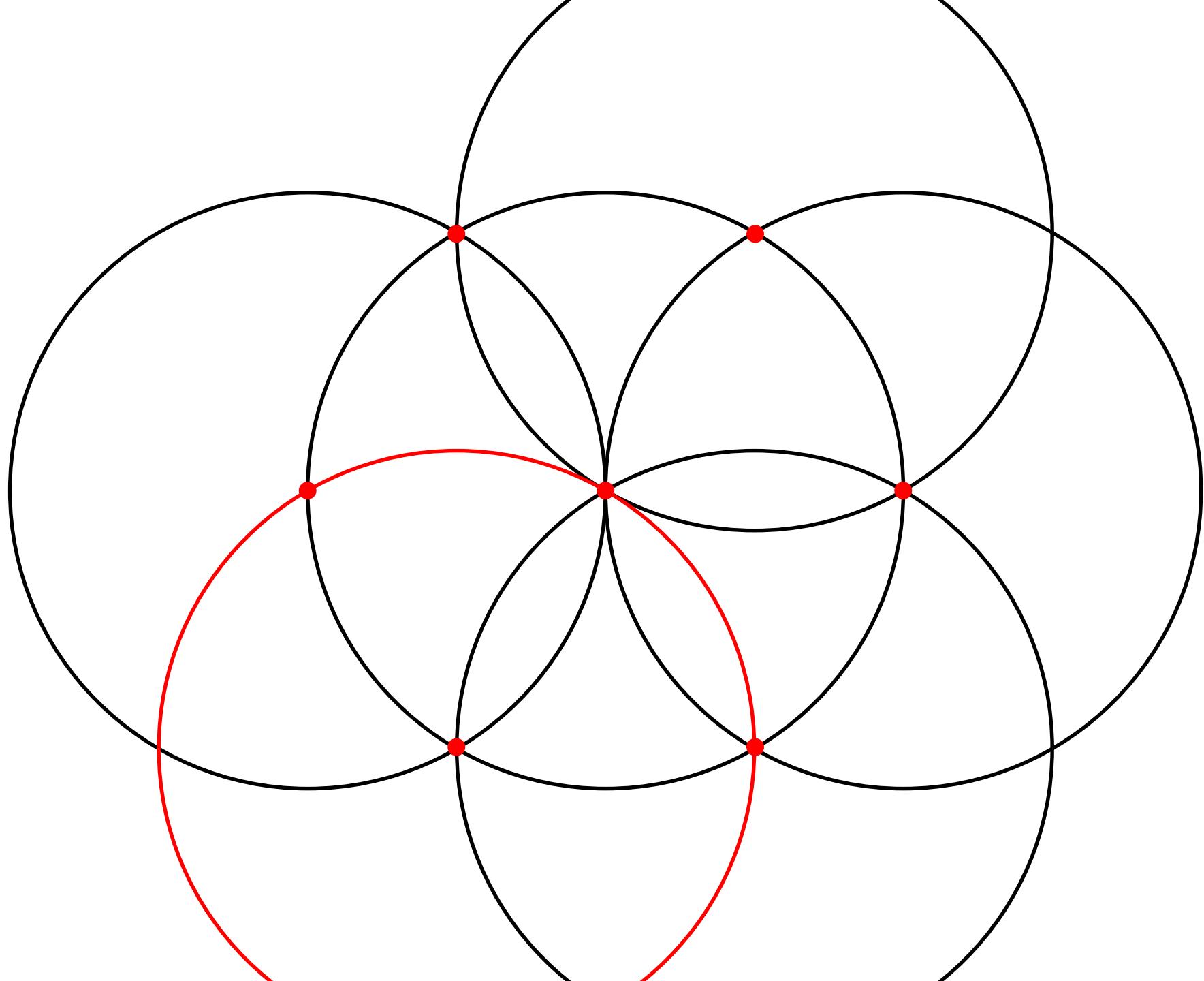


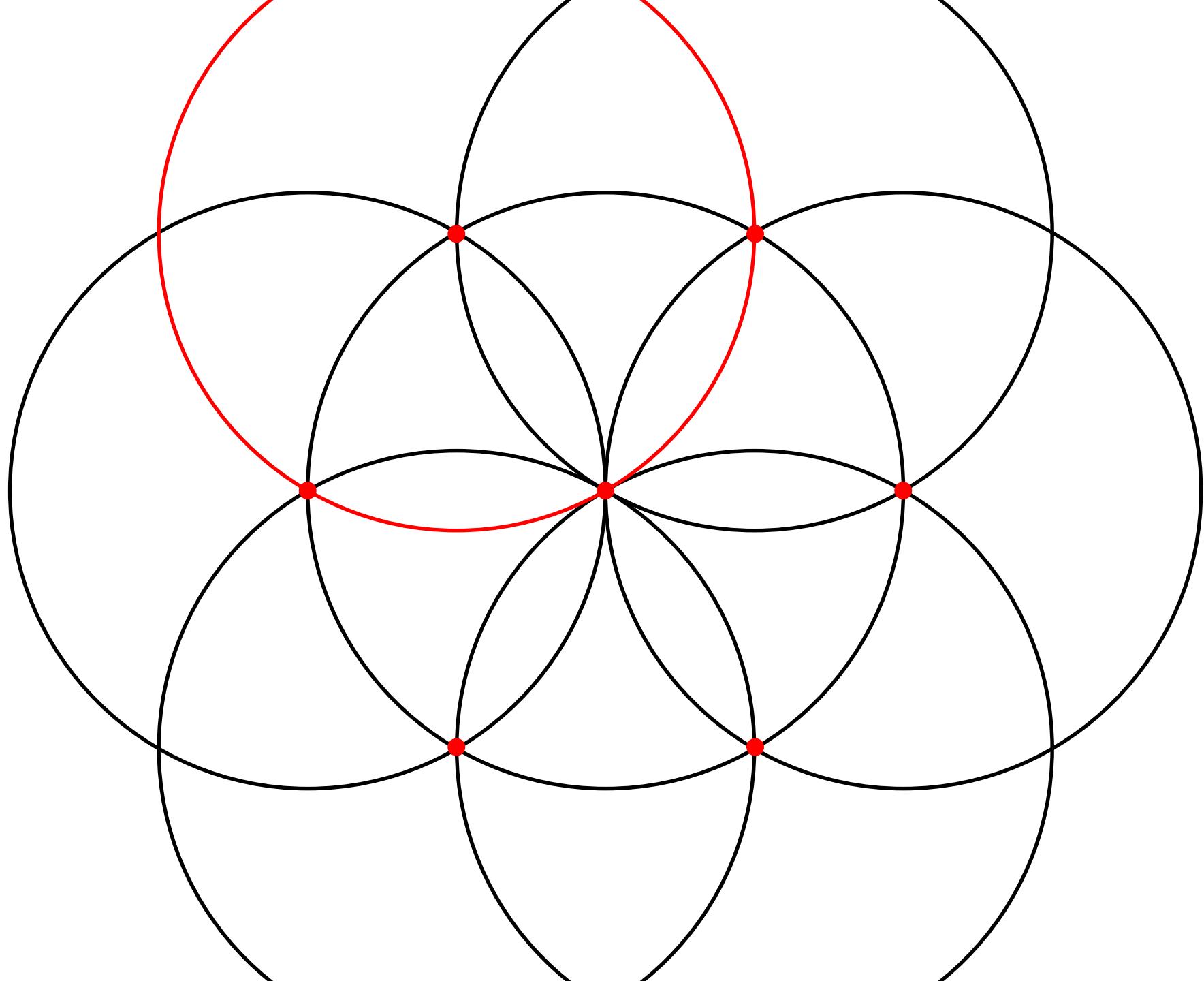
How to Construct the Flower of Life

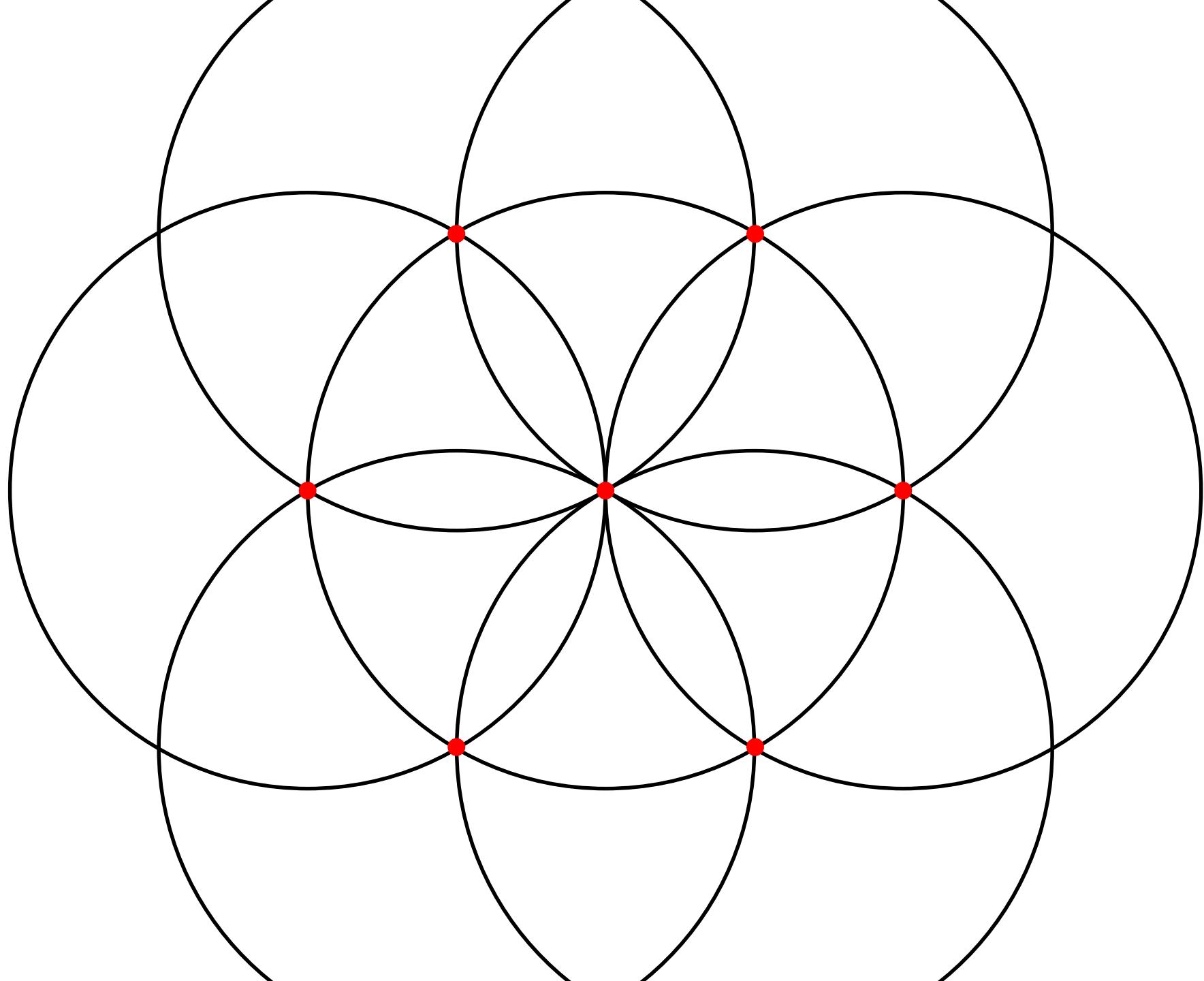






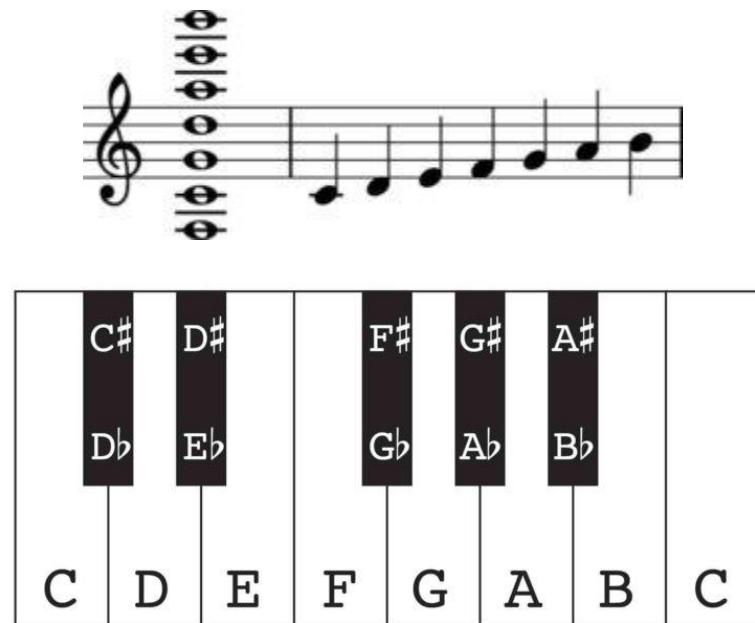
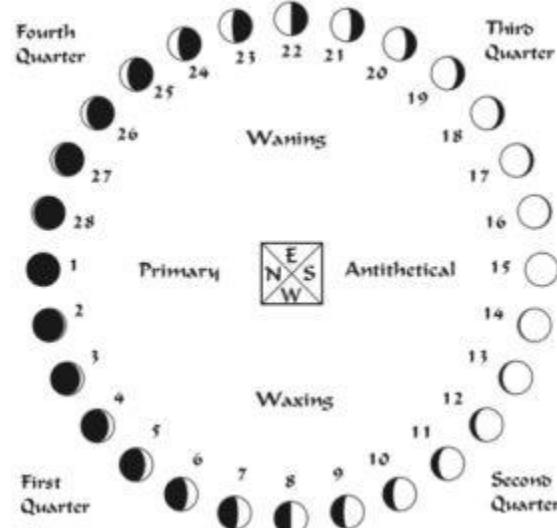






HEPTAD

“7”





Saturn – Saturday



Jupiter – Thursday



Mars – Tuesday



Sun – Sunday



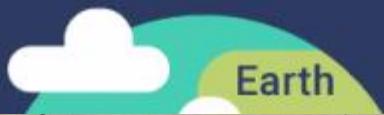
Venus – Friday



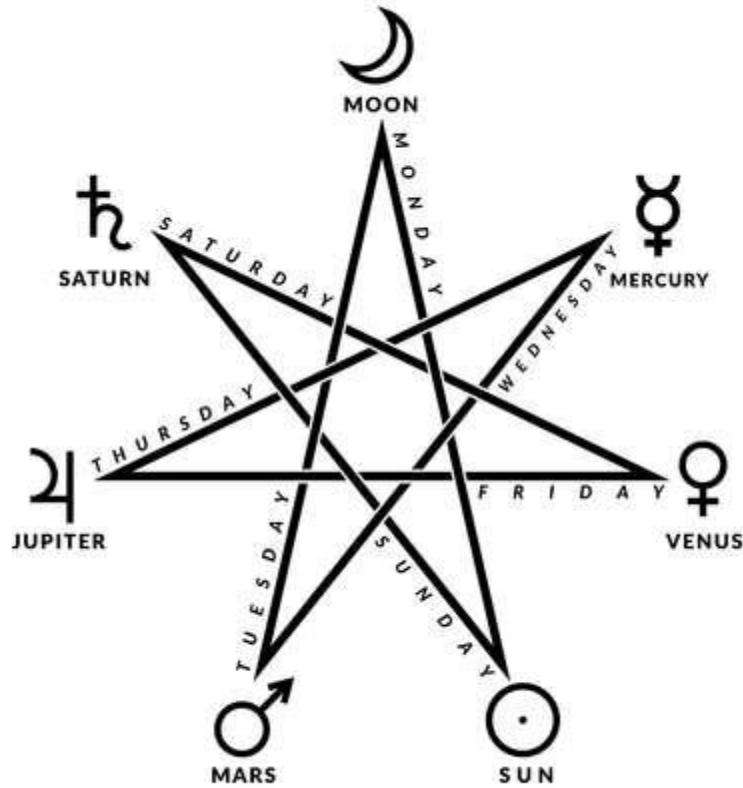
Mercury – Wednesday

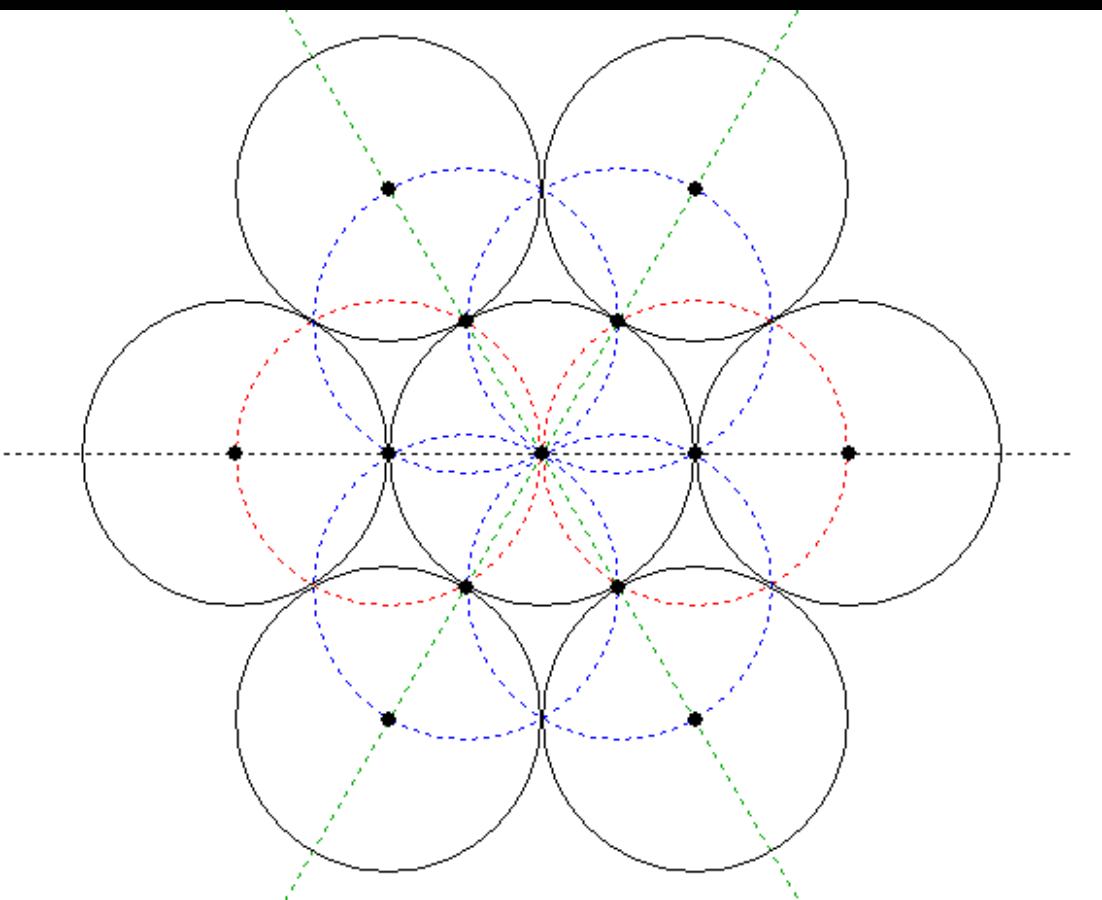
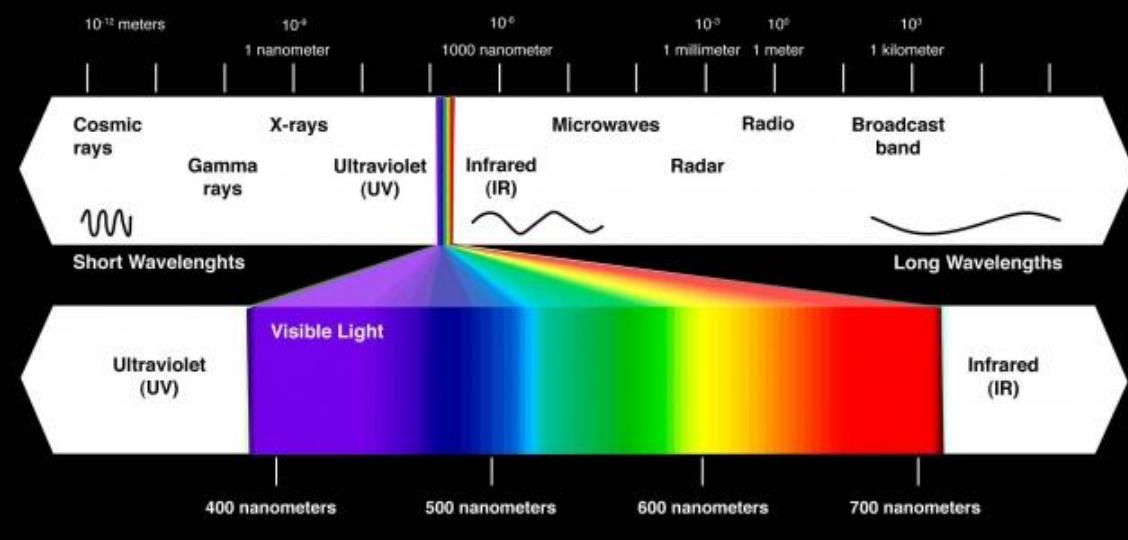


Moon – Monday

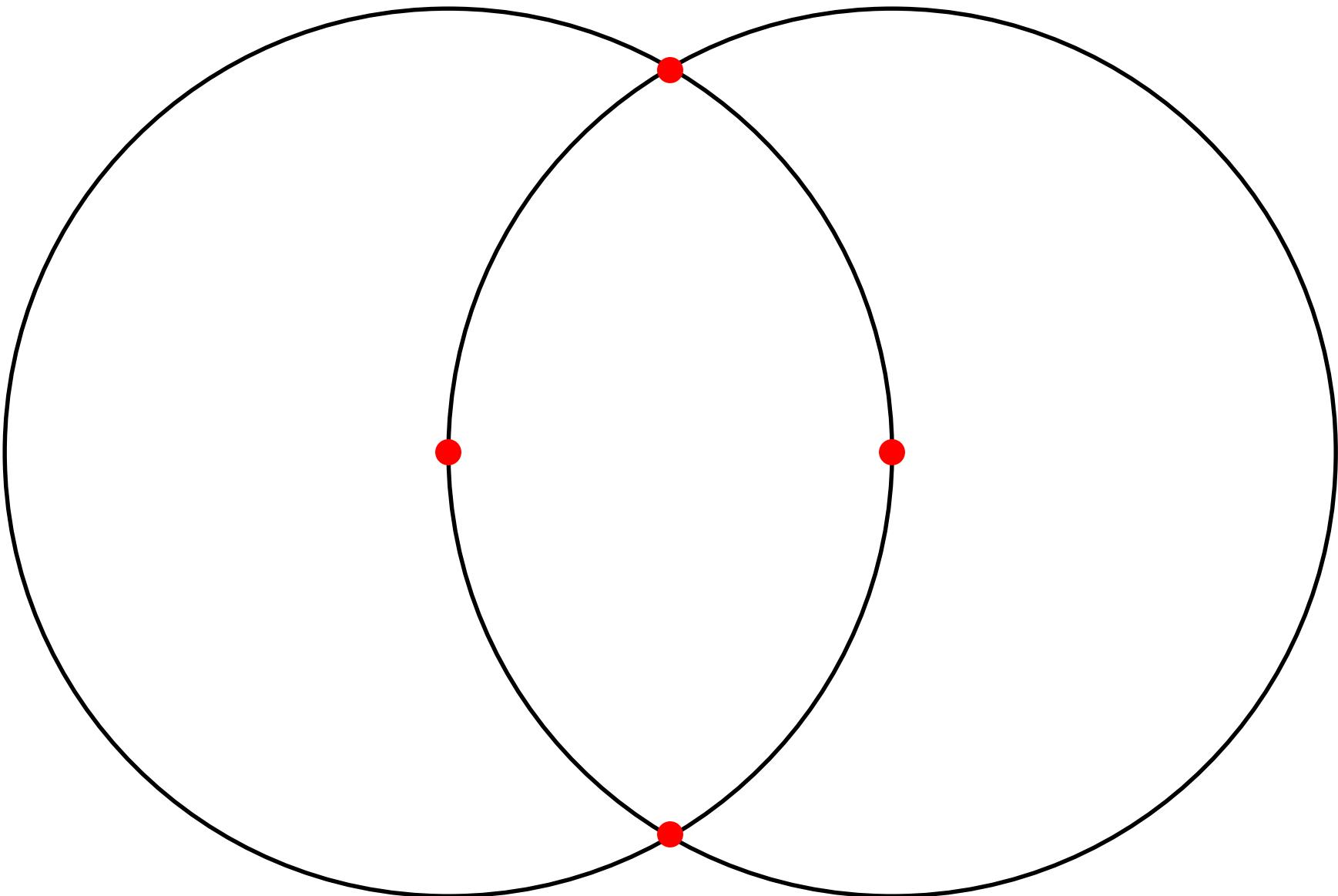


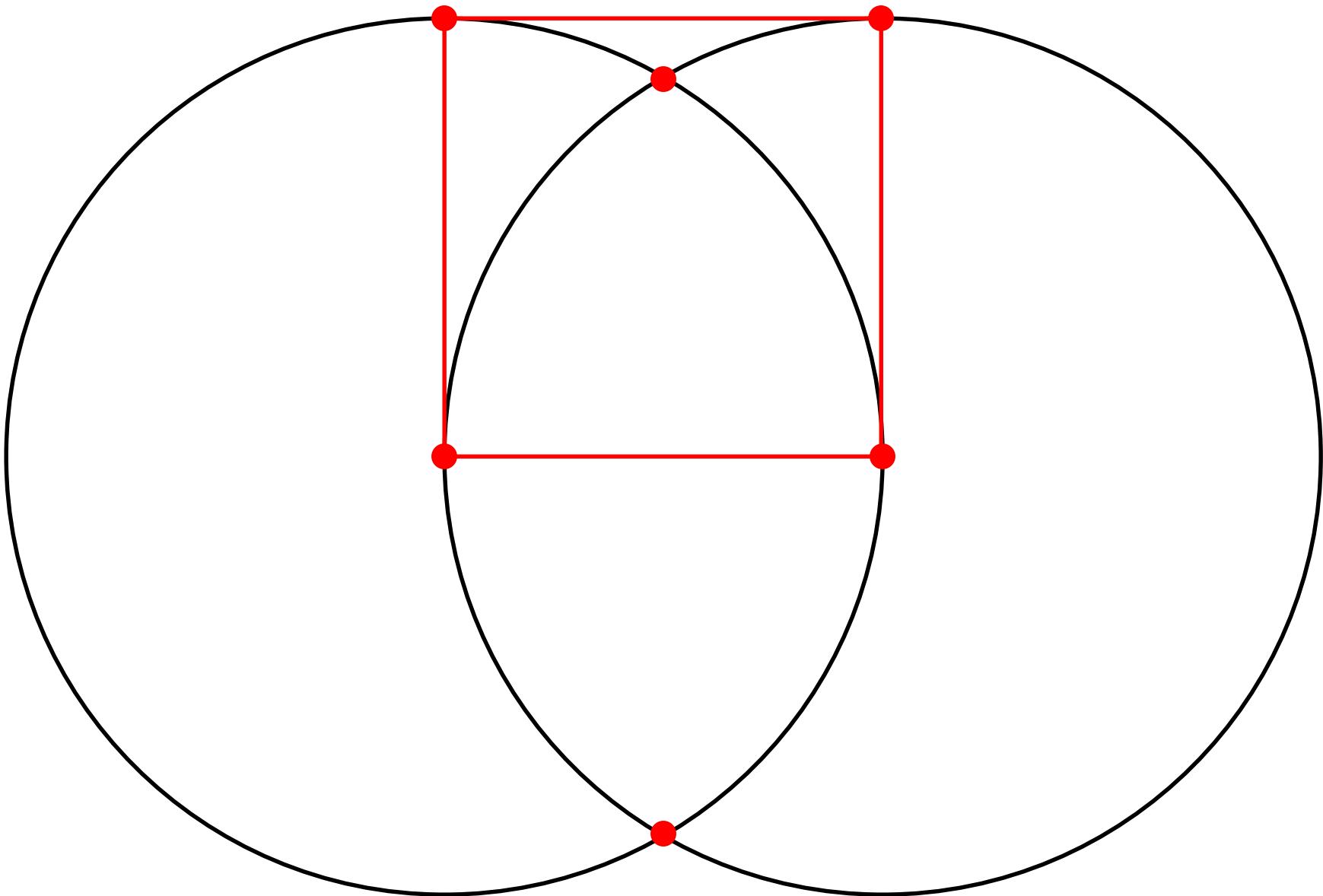
Earth

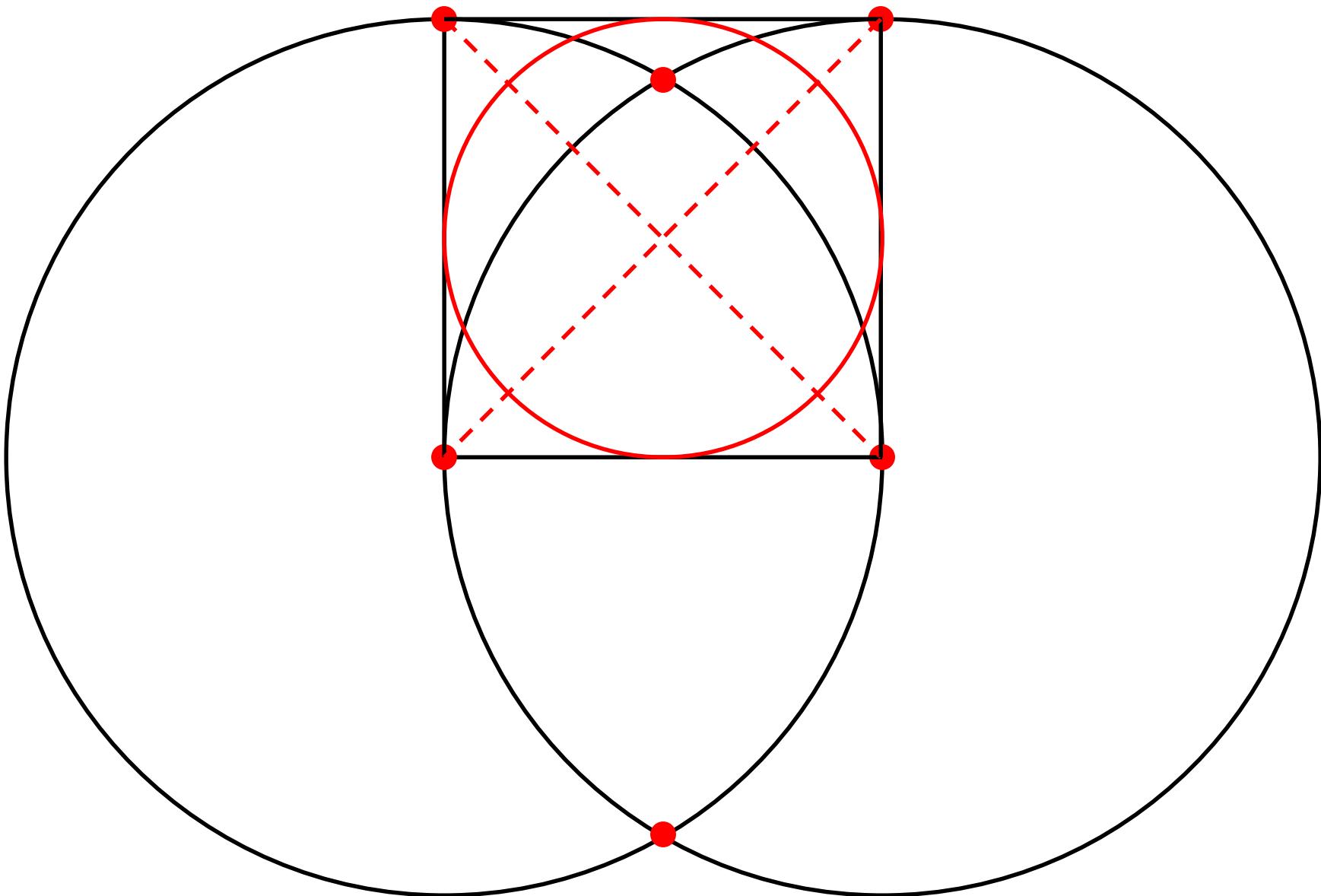


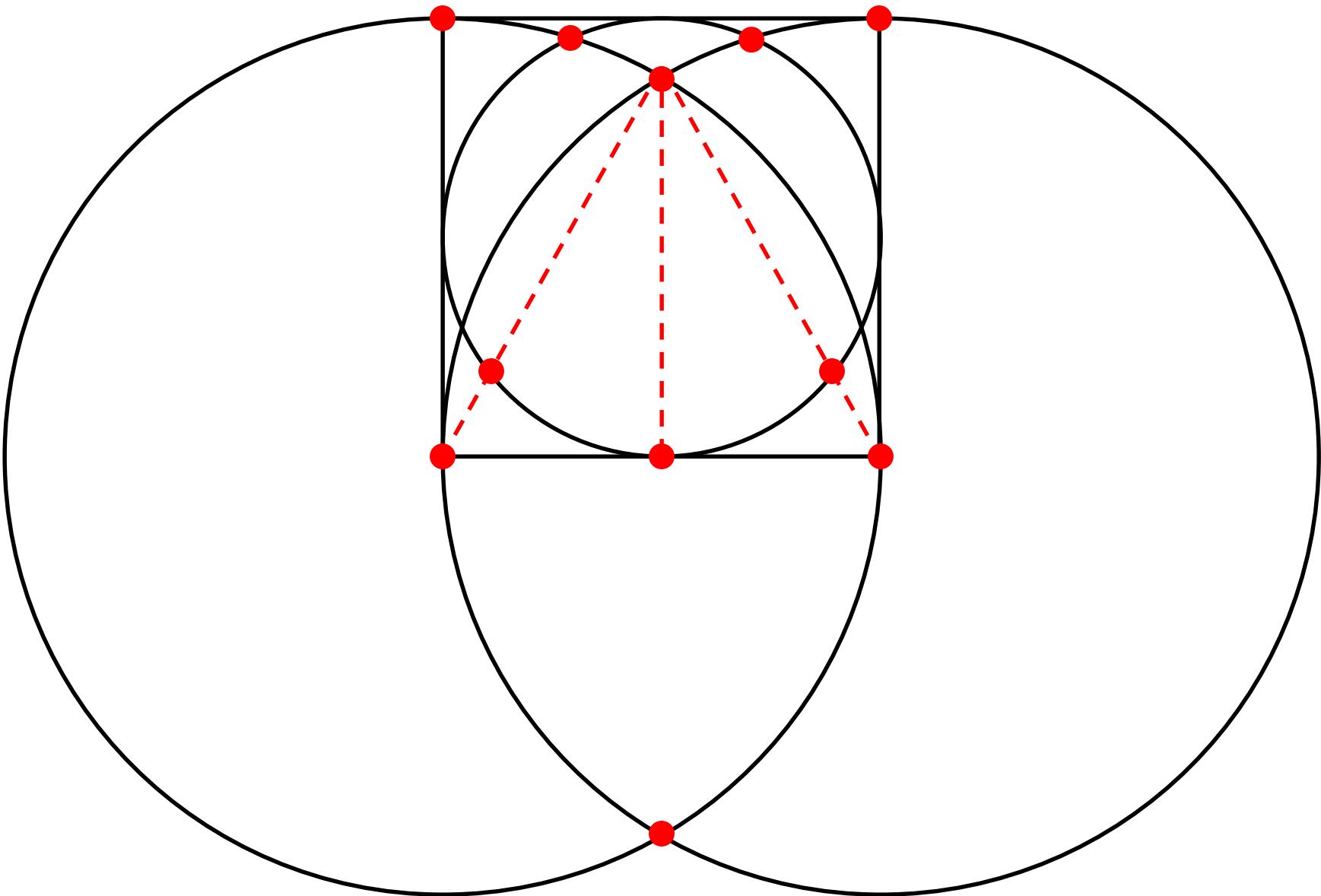


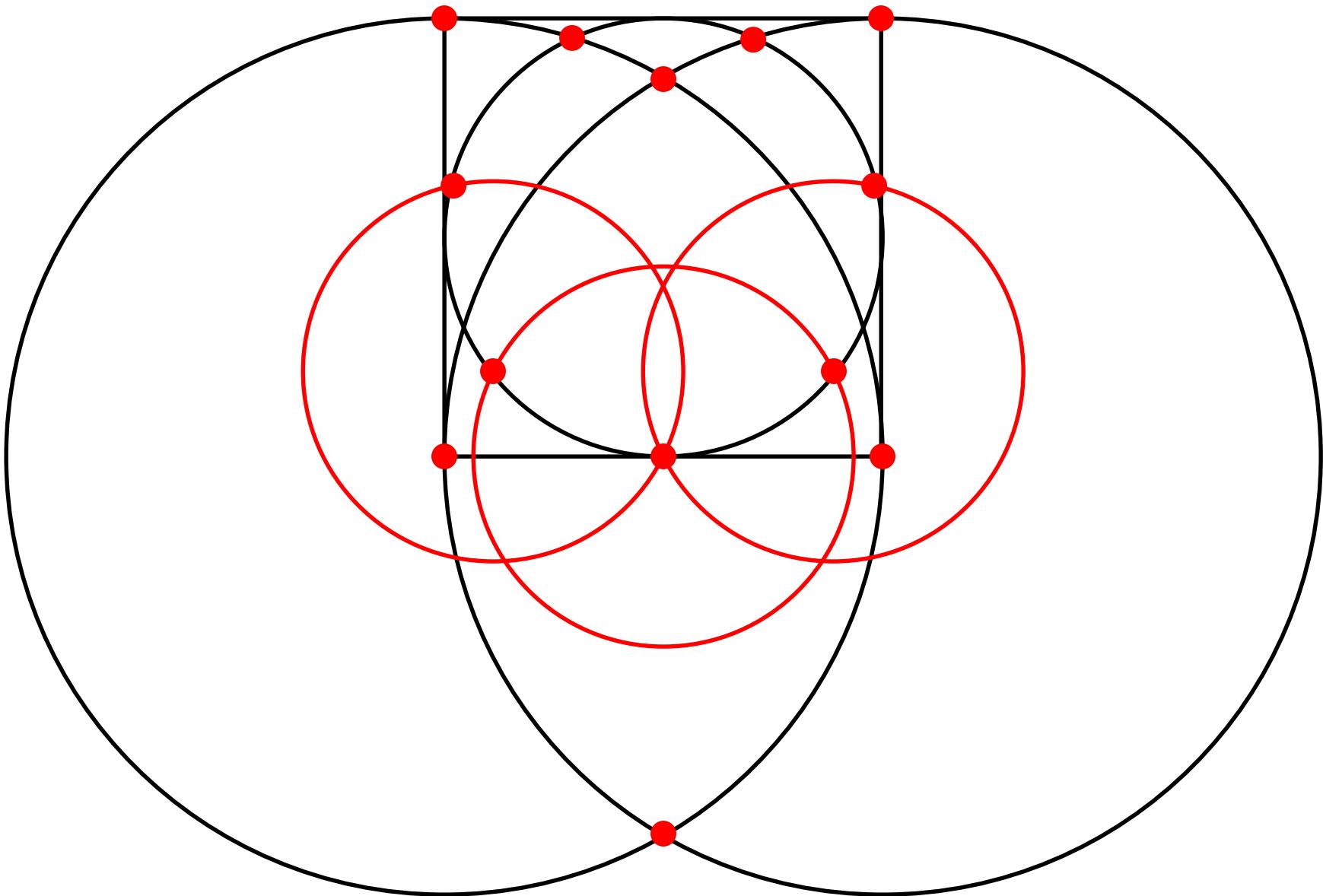
How to Construct the Heptagon

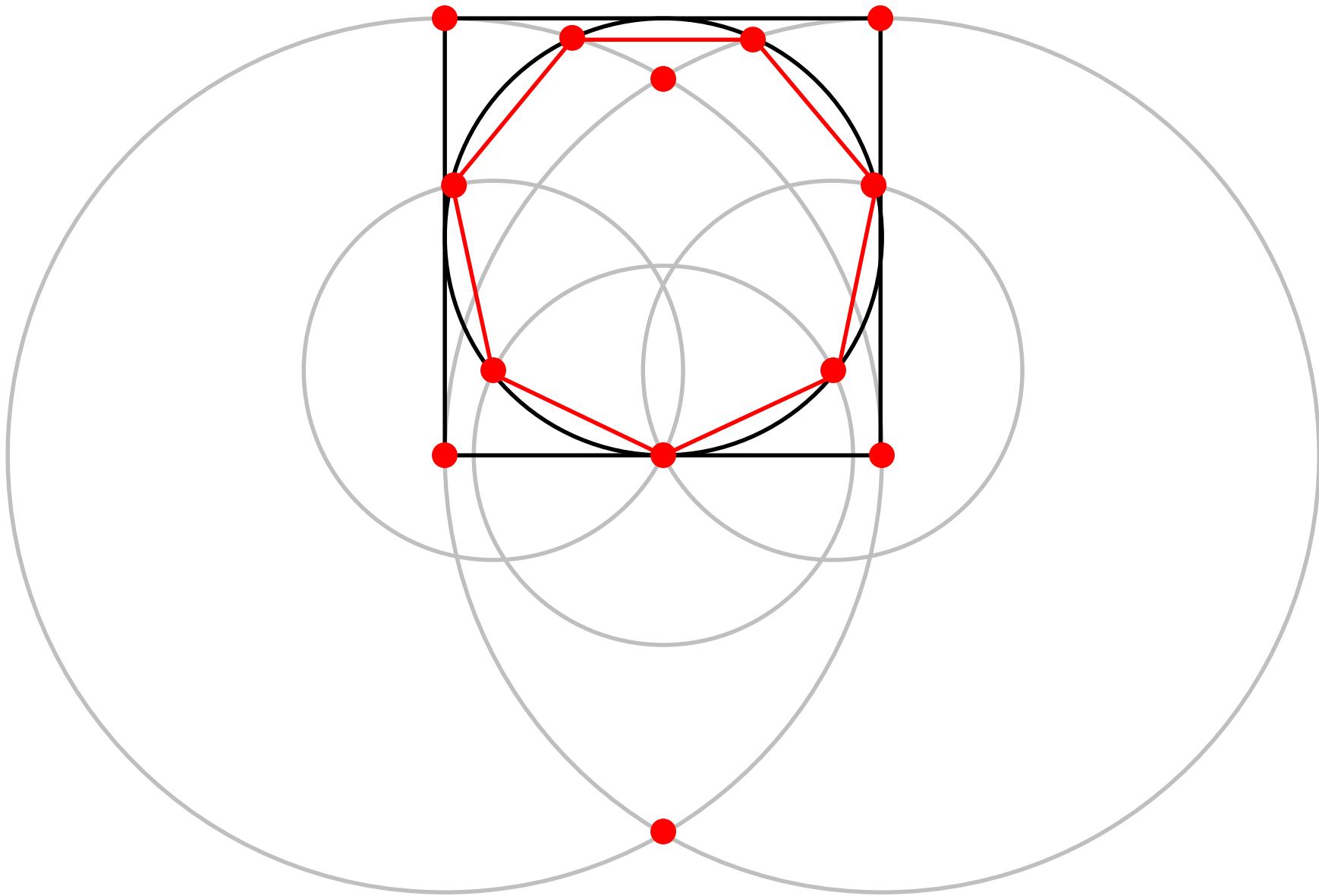






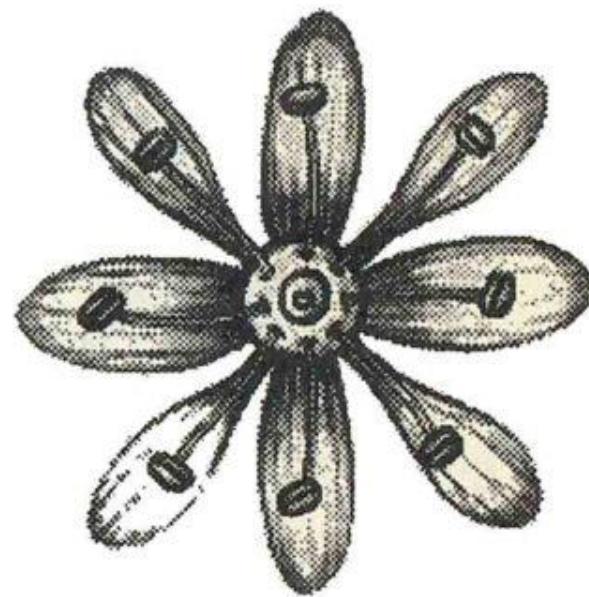
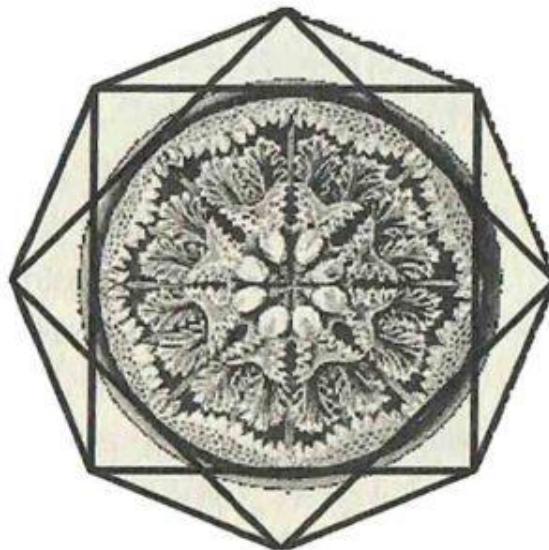
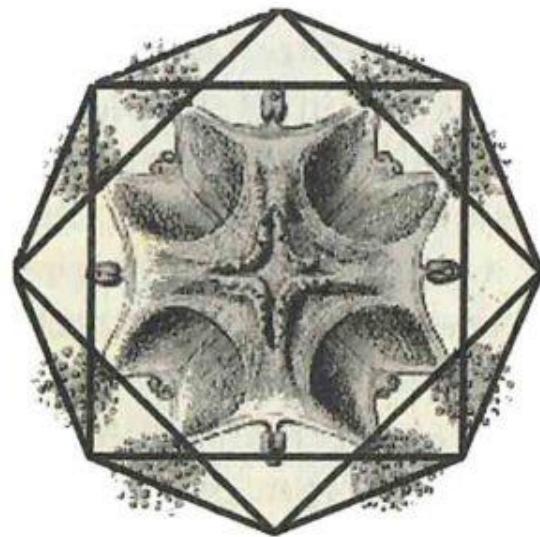
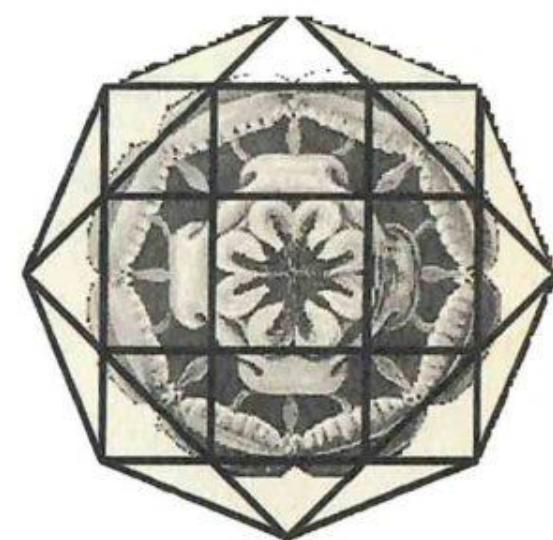
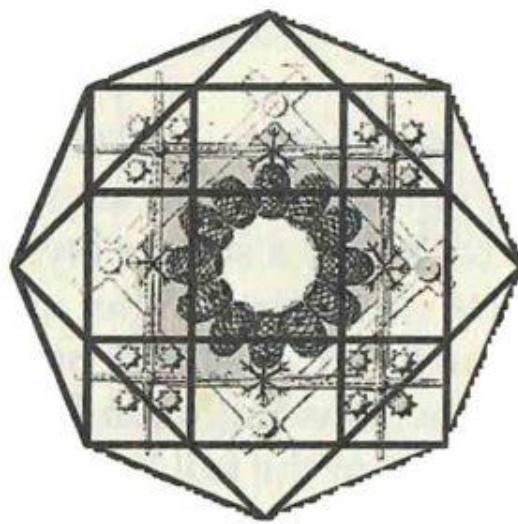
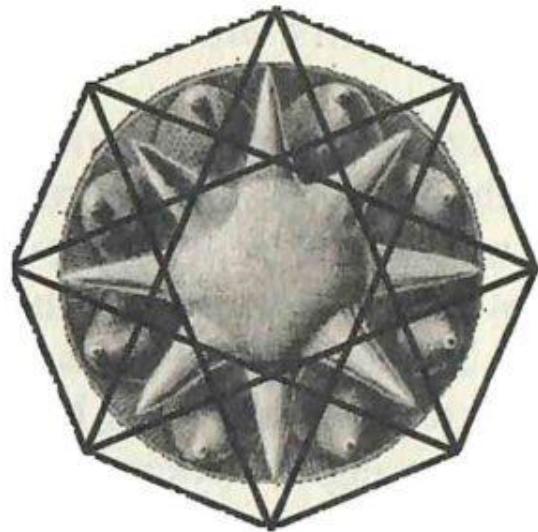






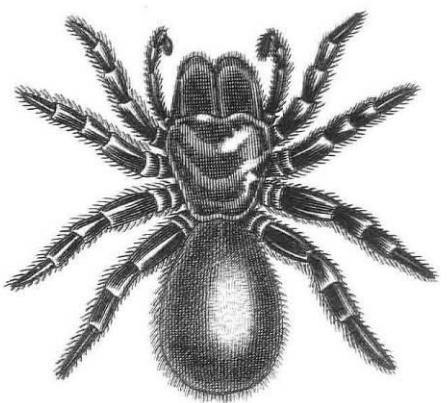
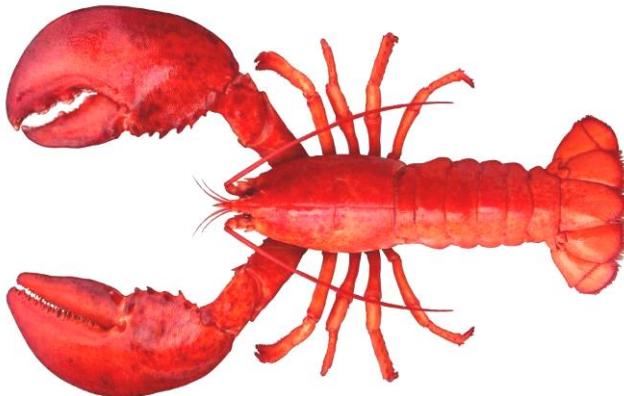
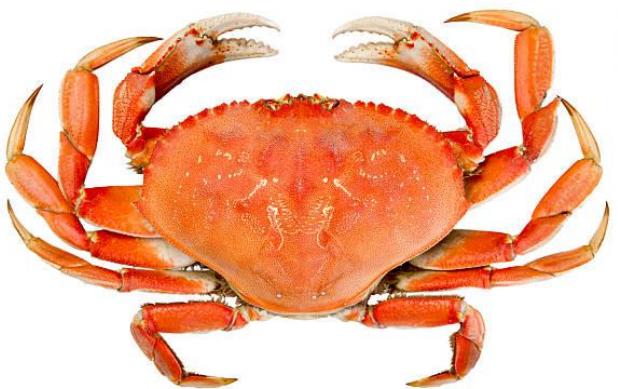
OCTAD

“8”



Seen from below, many jellyfishes and "glass" sponges display octagonal structure.

Male maple flower



Waxing
Gibbous
Moon



First
Quarter
Half
Moon



Waxing
Crescent
Moon



Full Moon



New
Moon



Waning
Gibbous
Moon

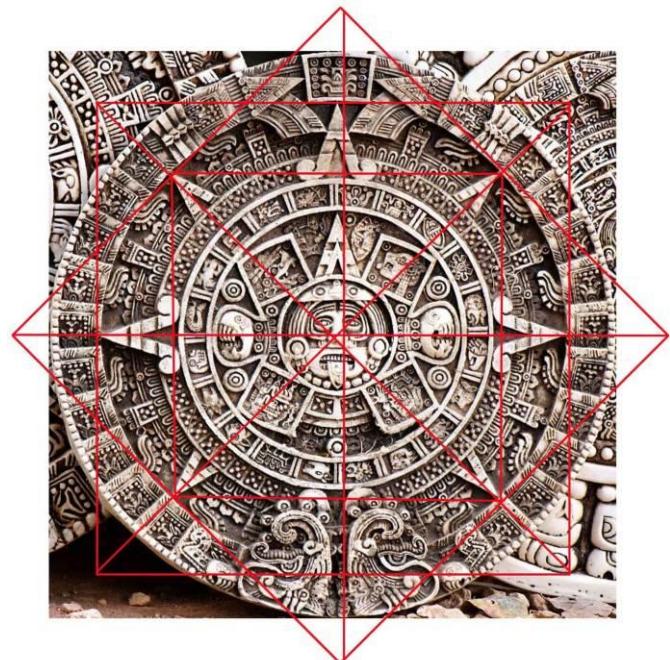


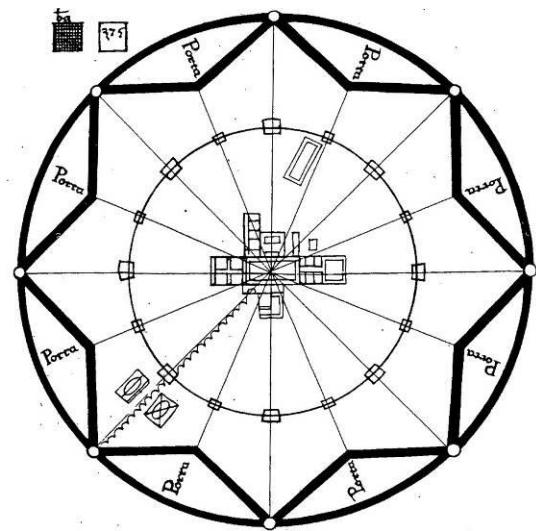
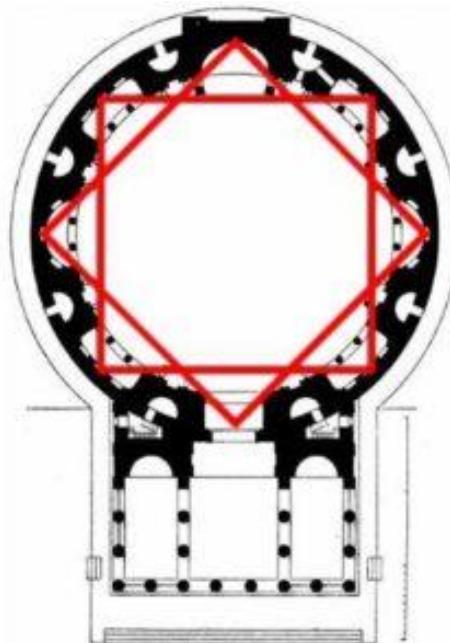
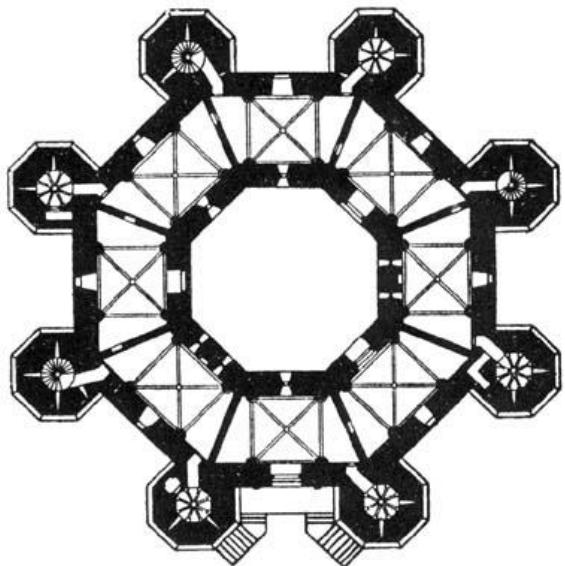
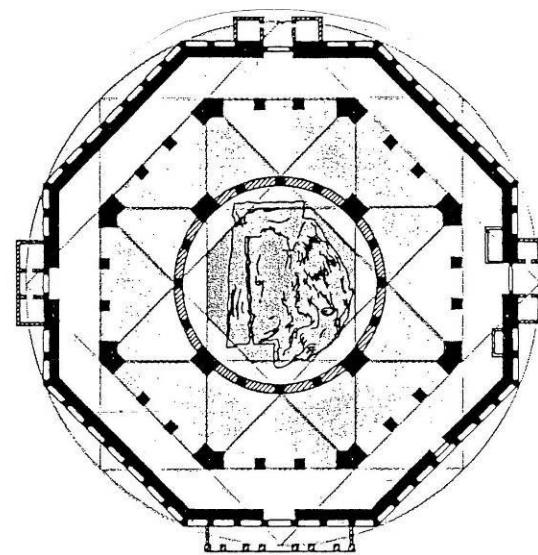
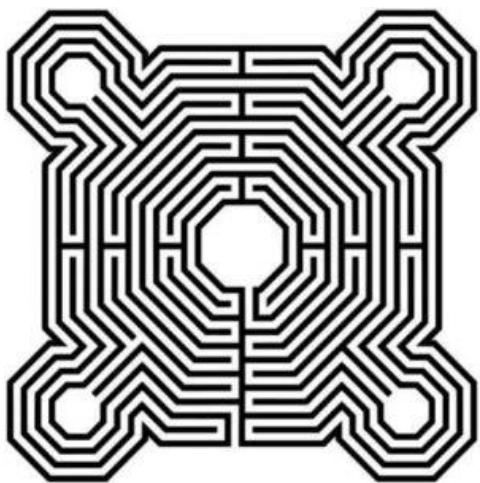
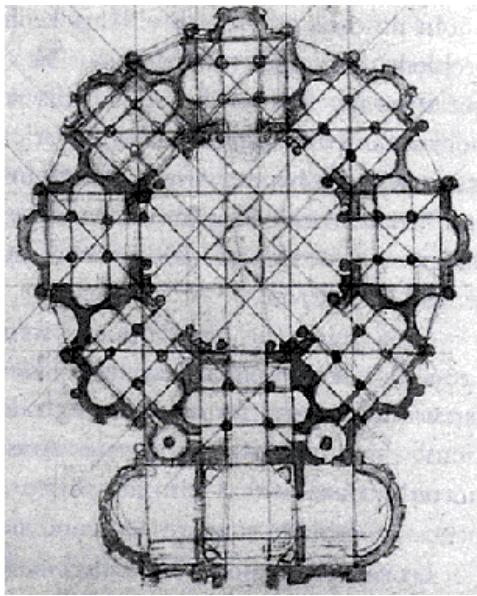
Three
Quarter
Half
Moon



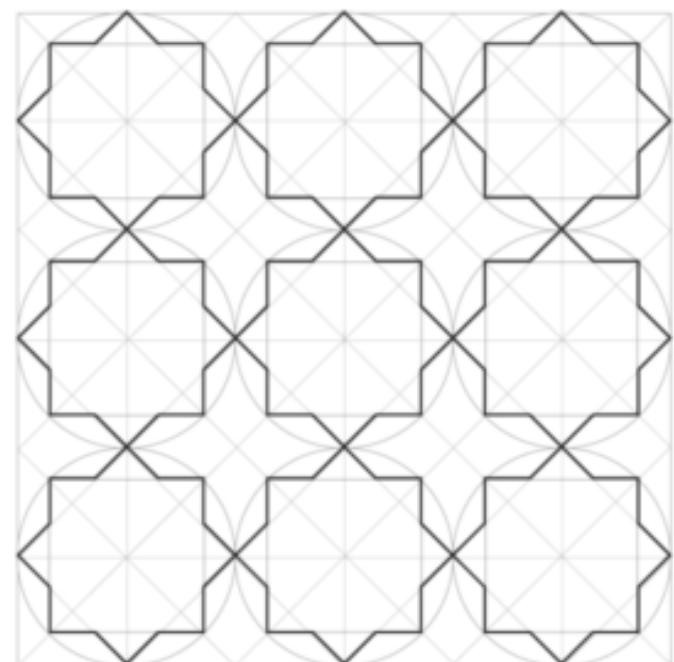
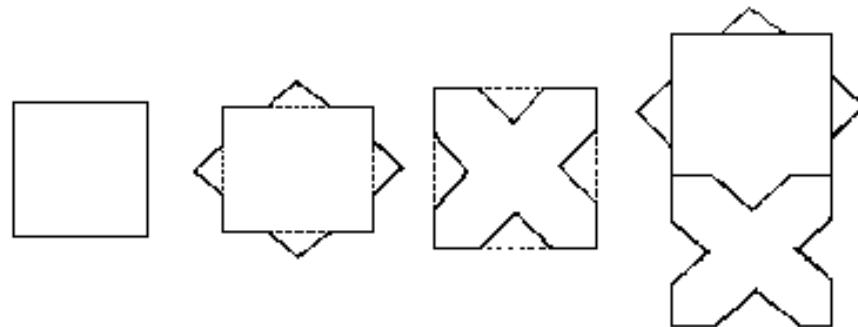
Waning
Crescent
Moon

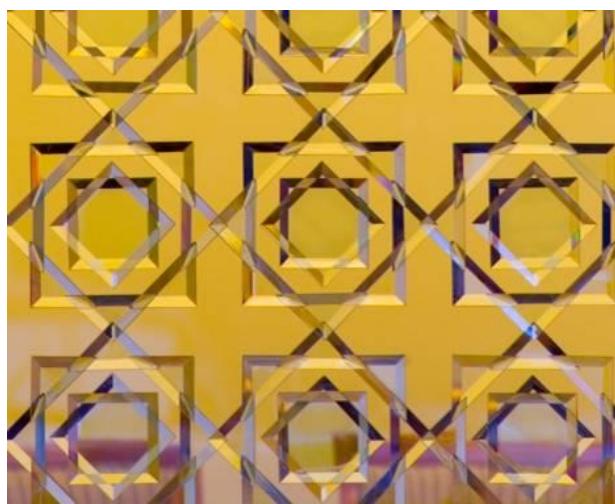
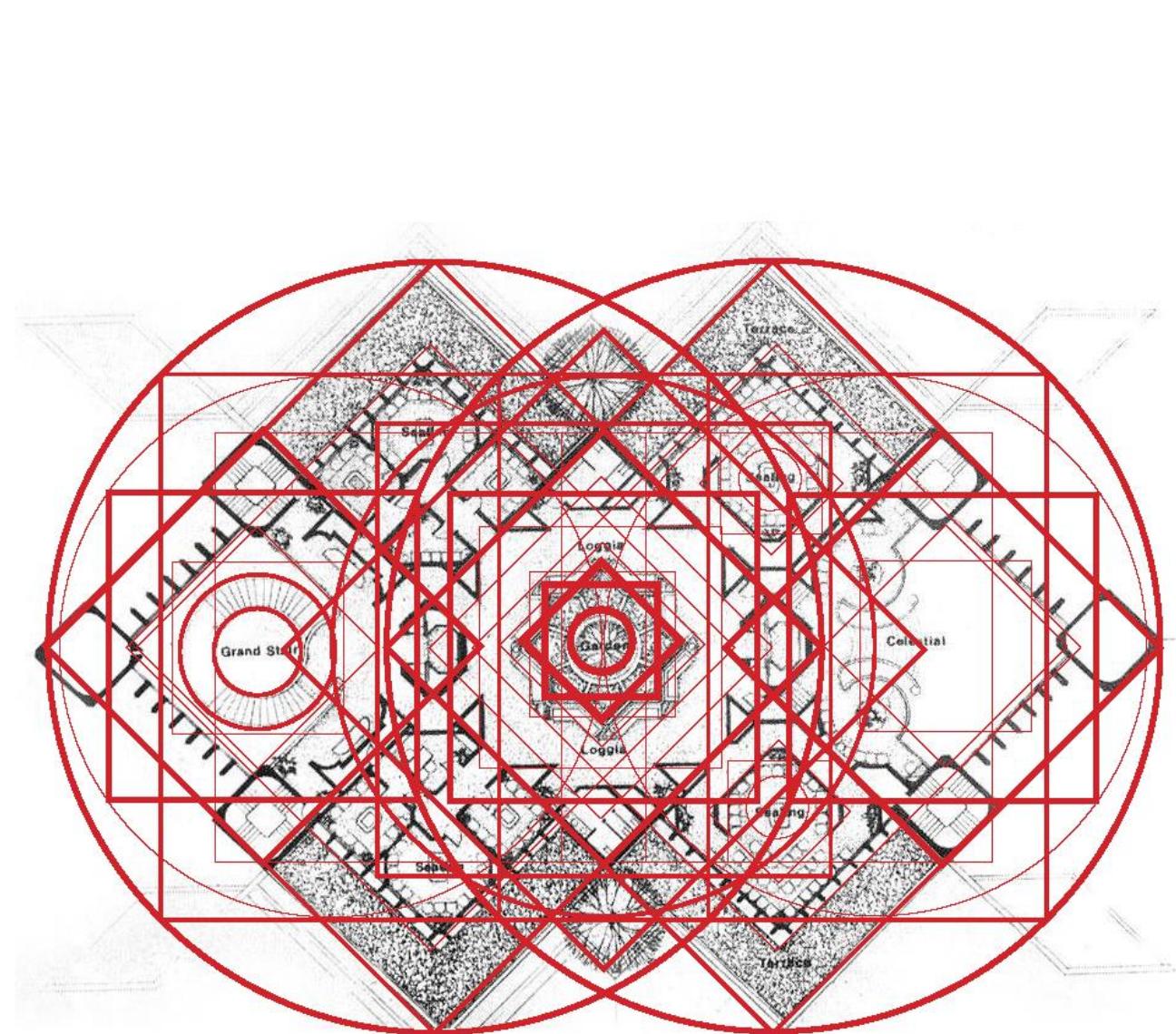




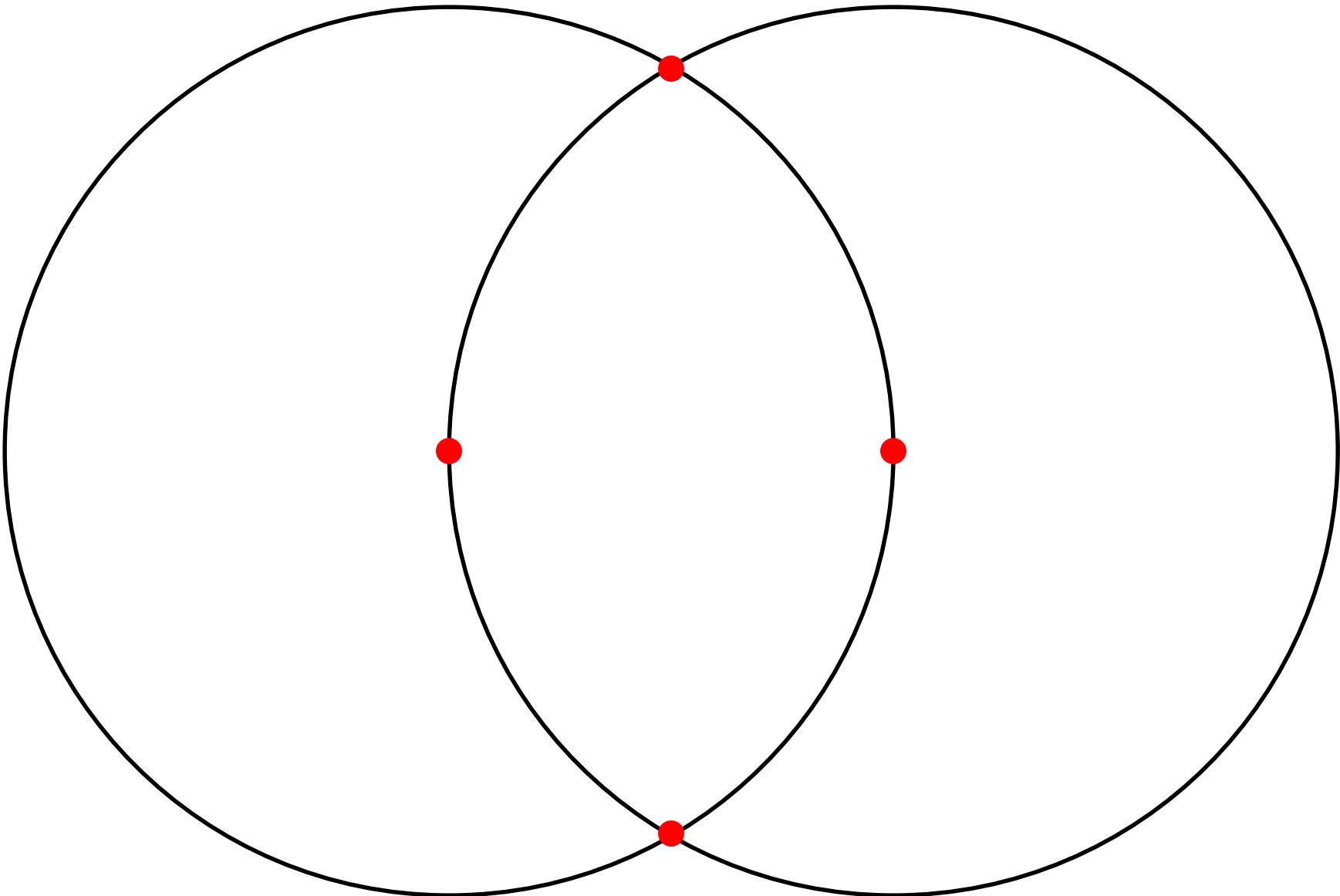


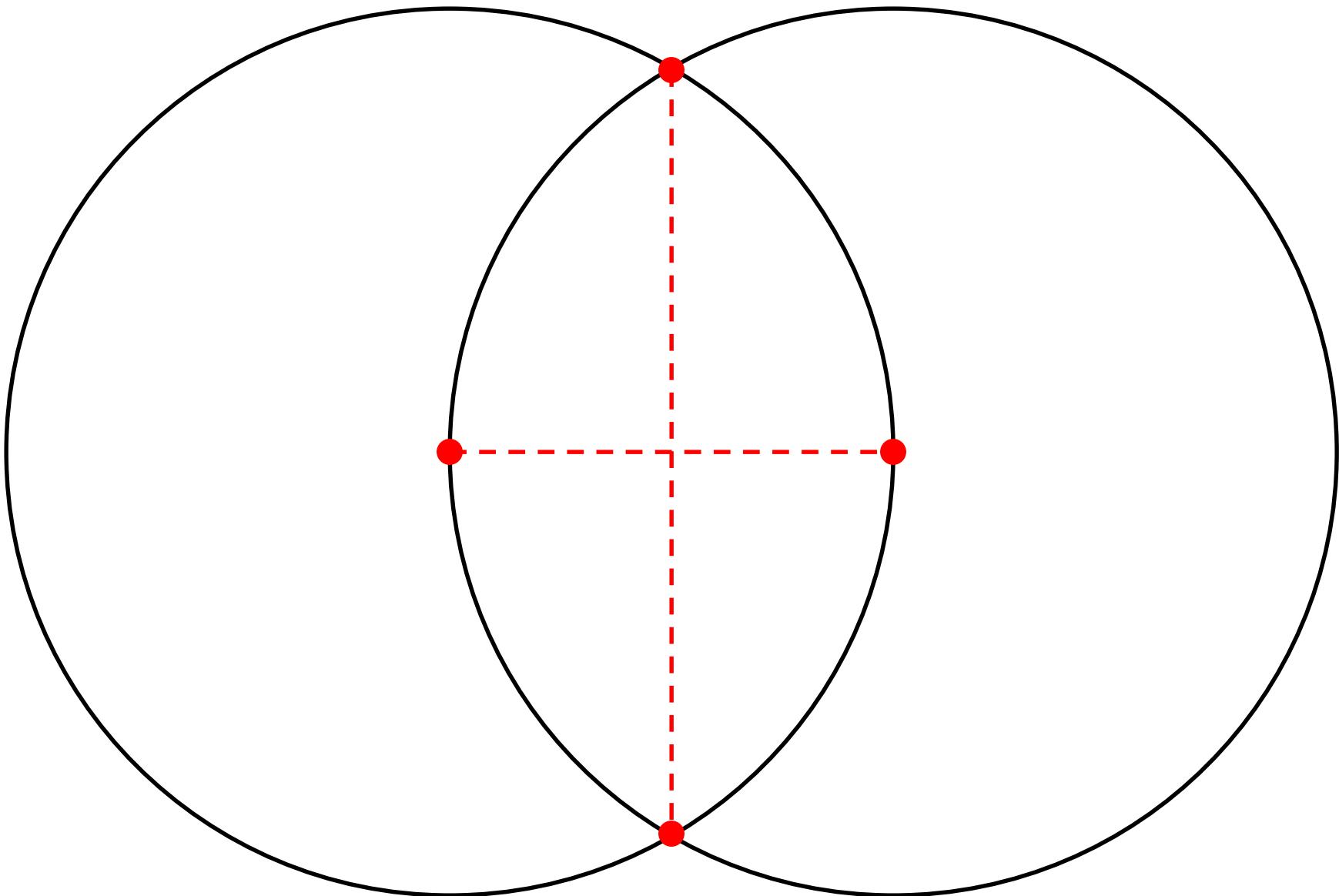


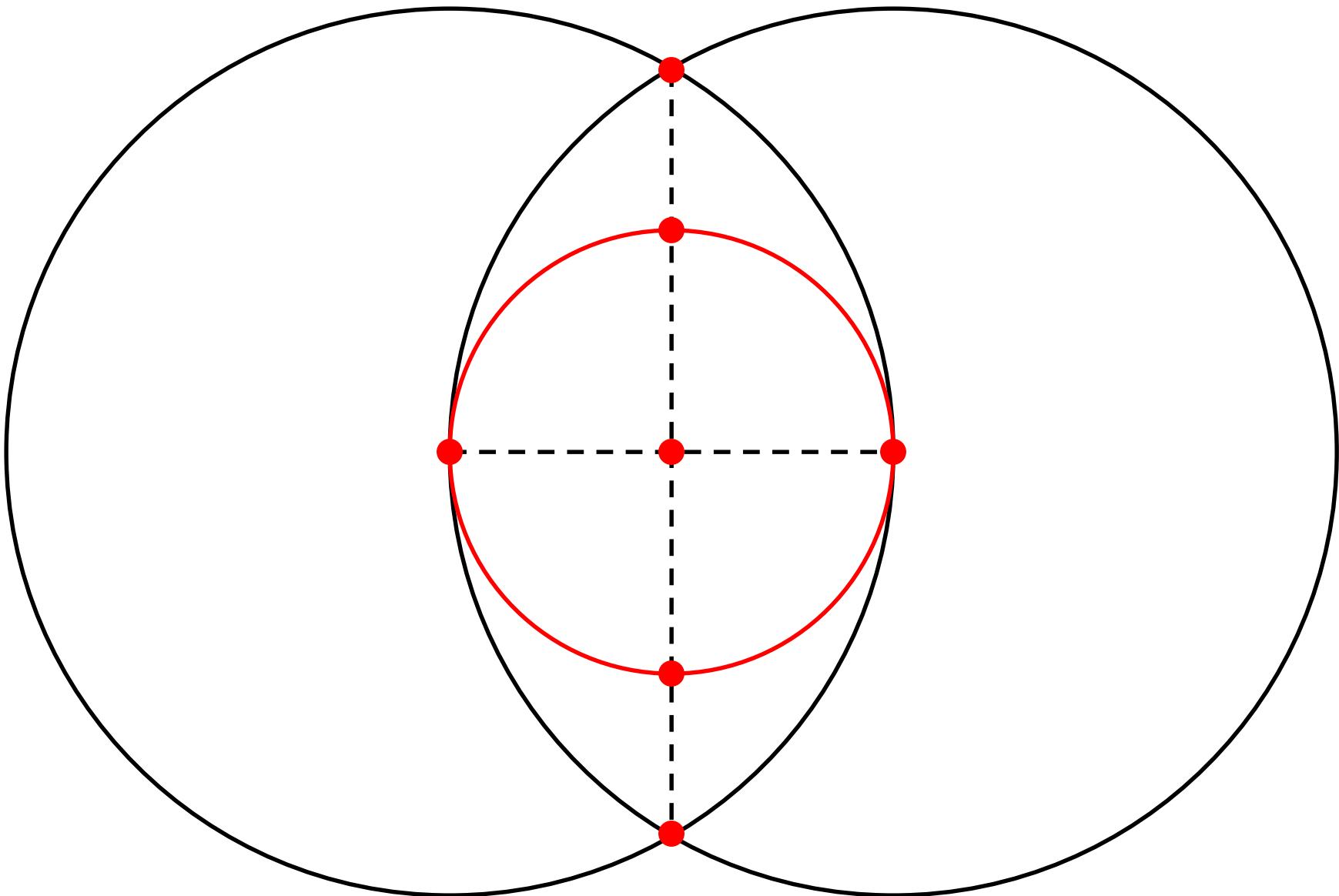


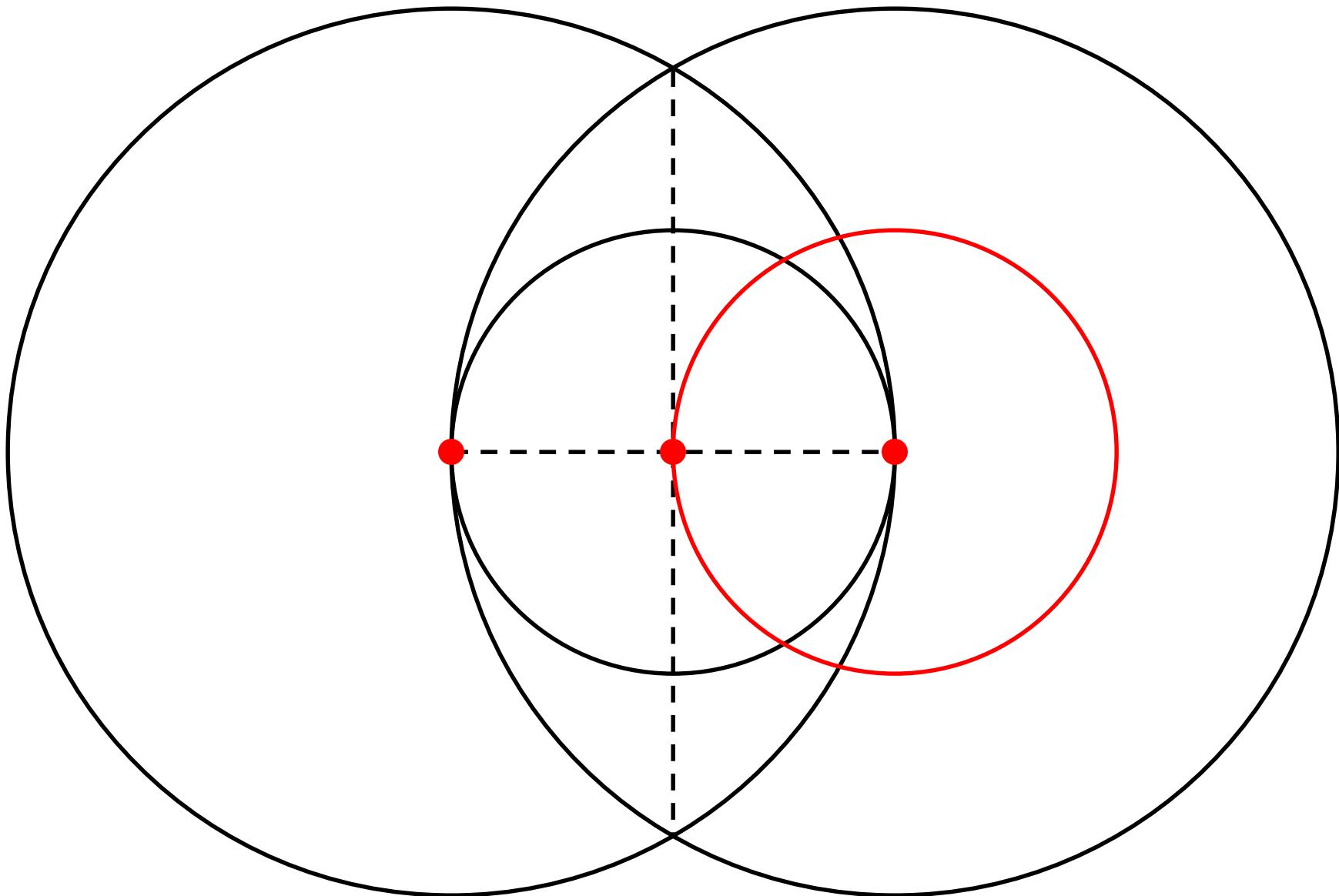


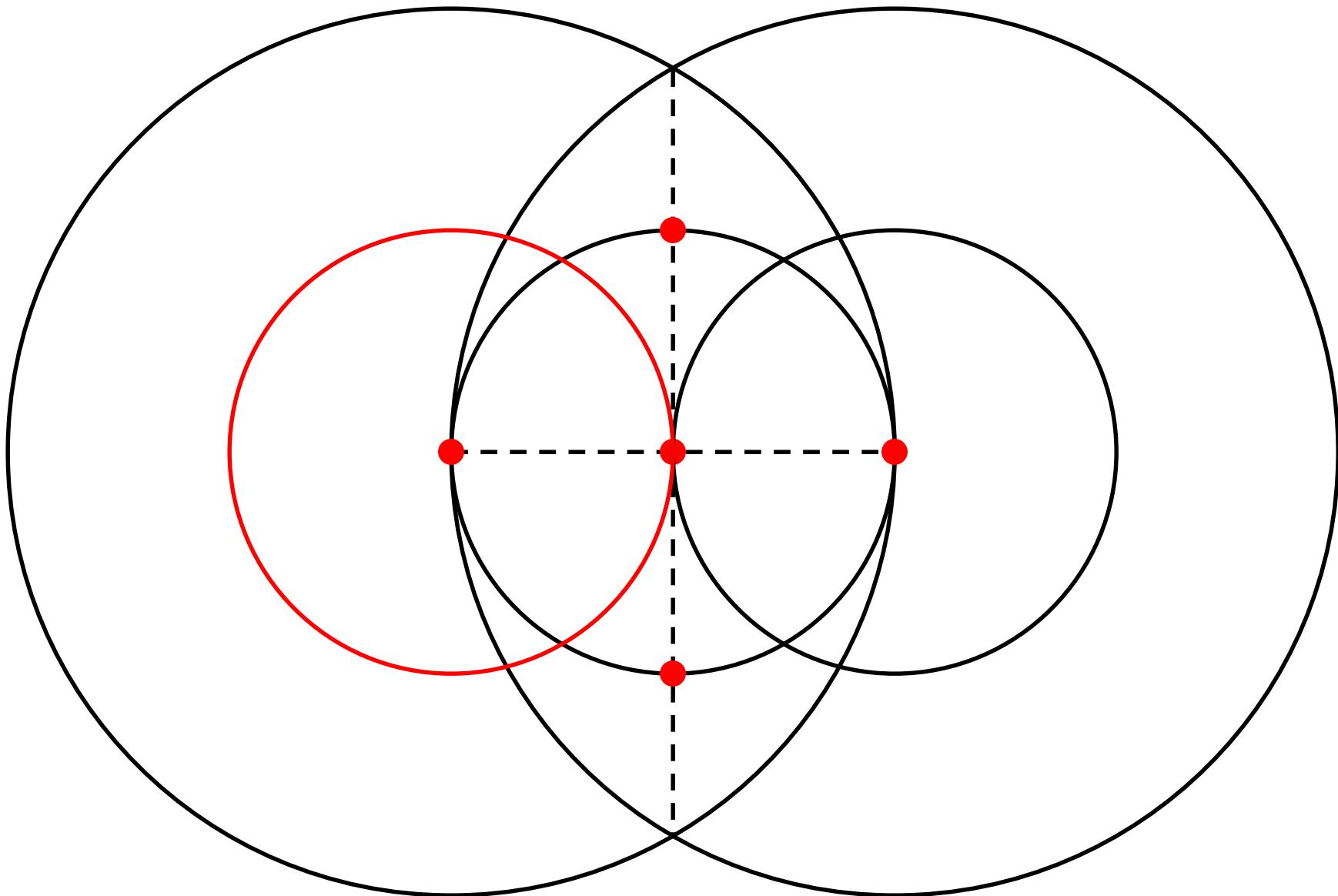
How to Construct the Octagon

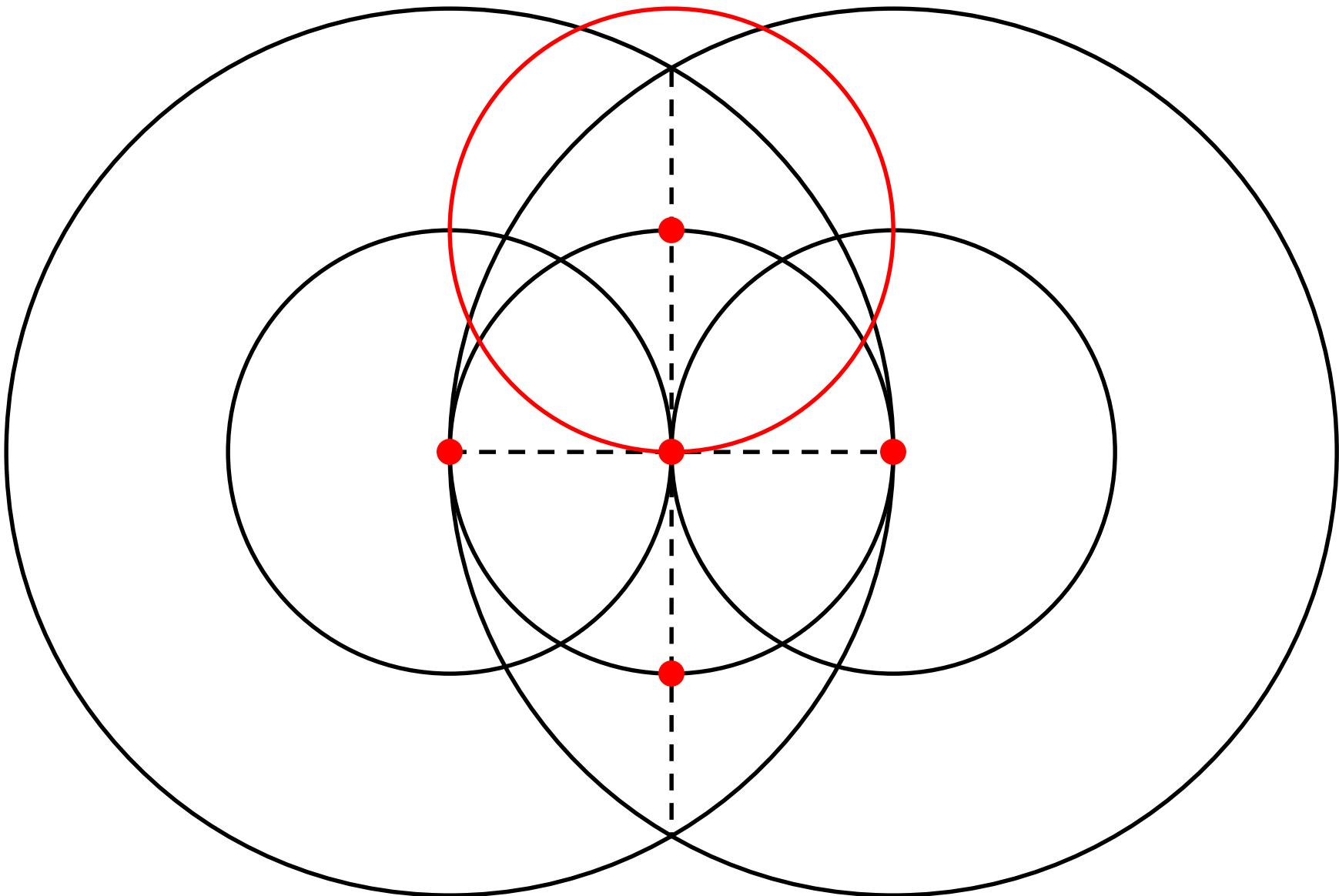


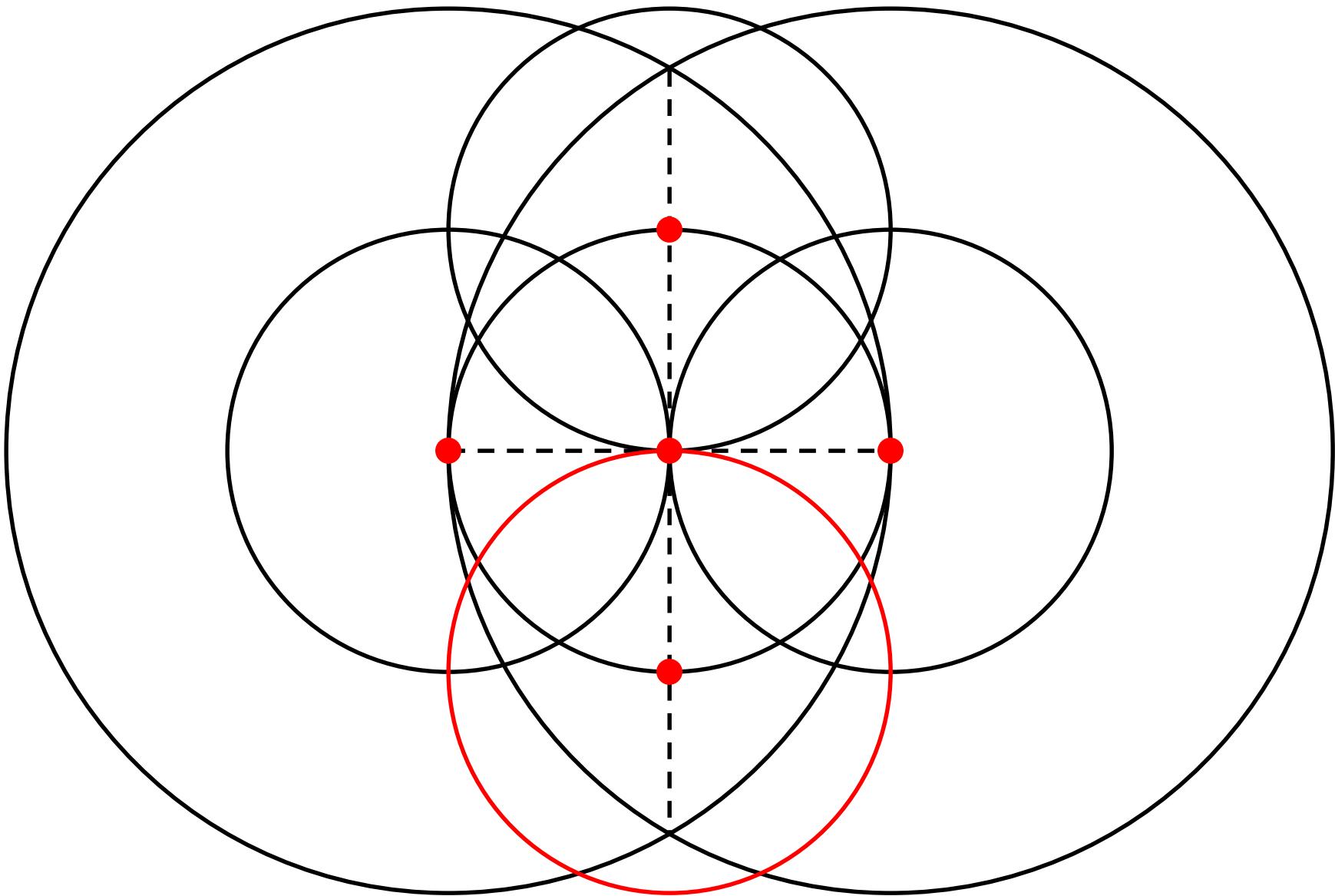


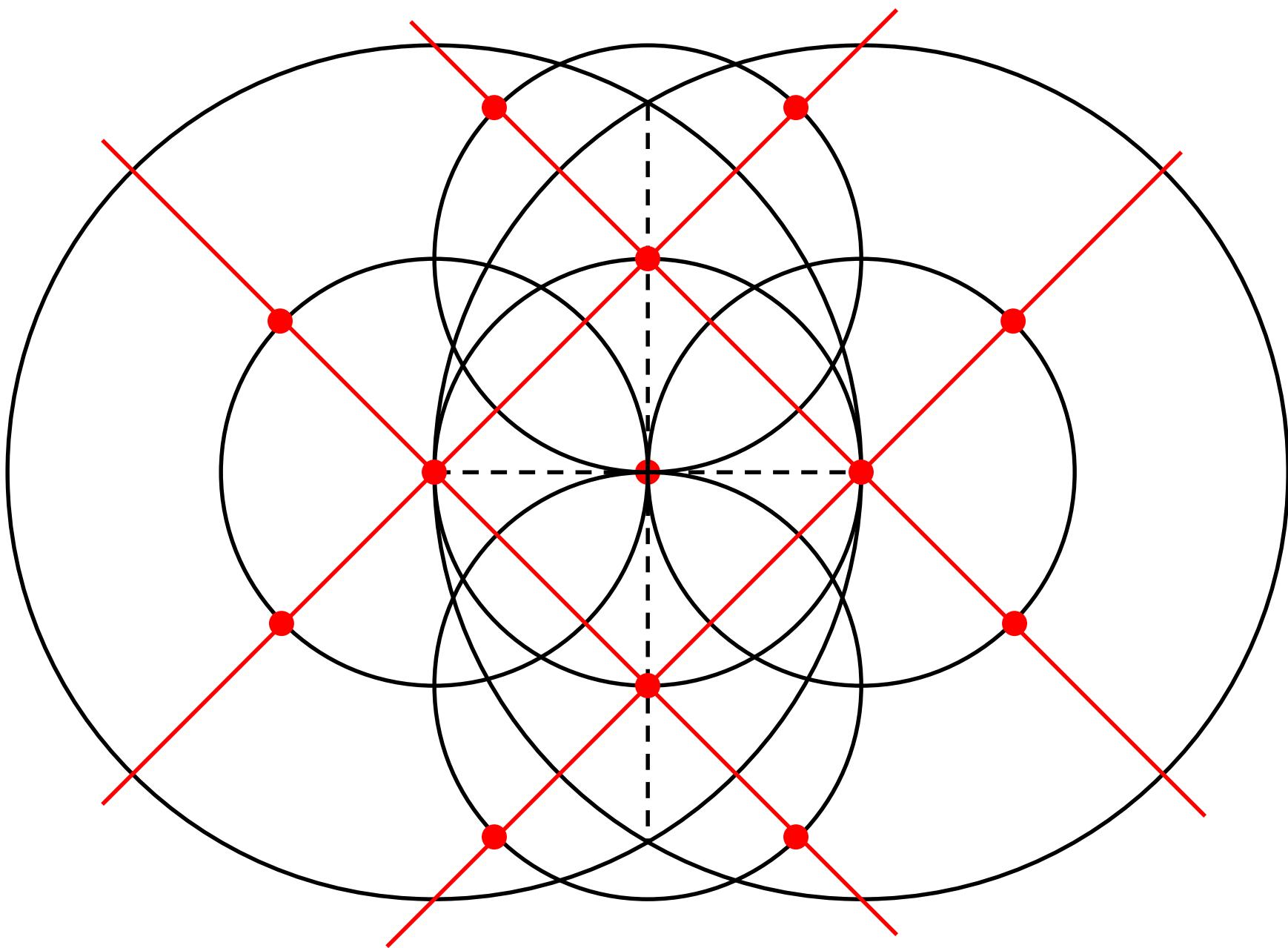


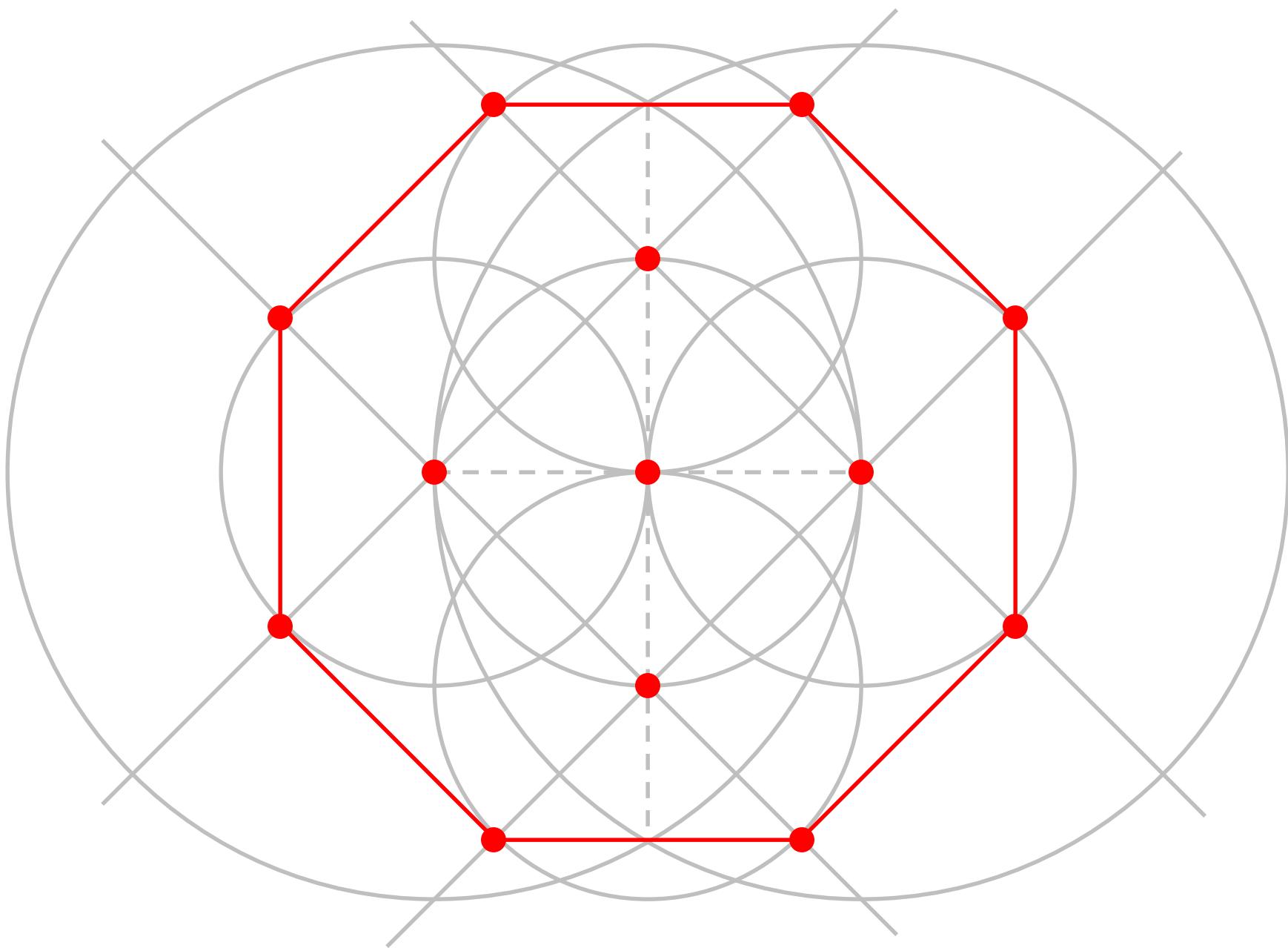






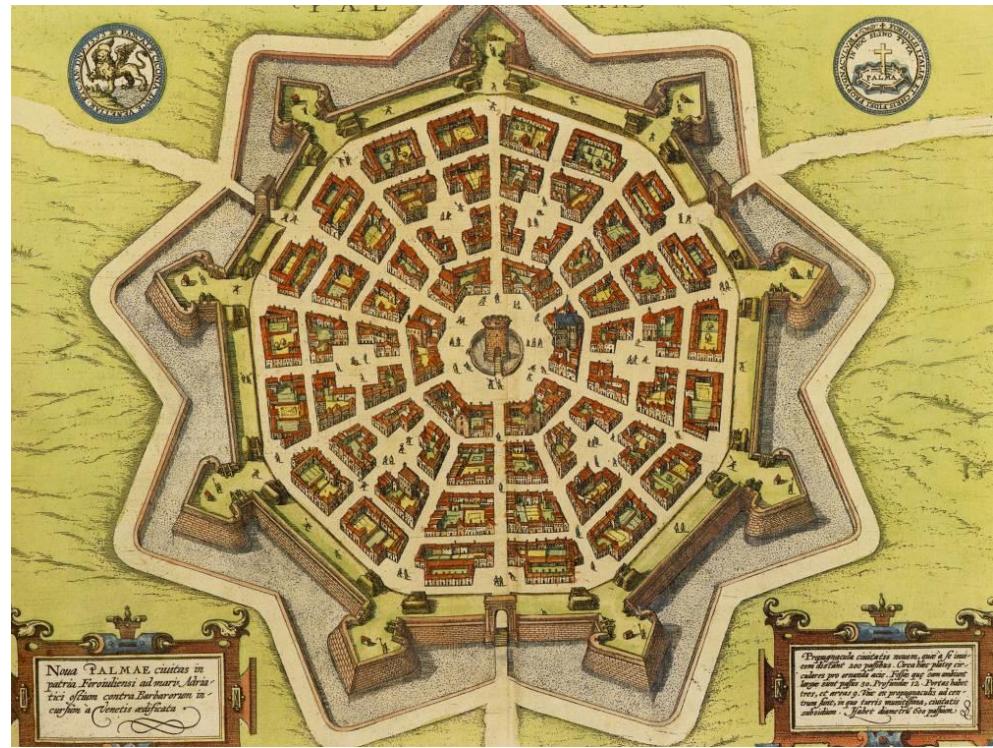




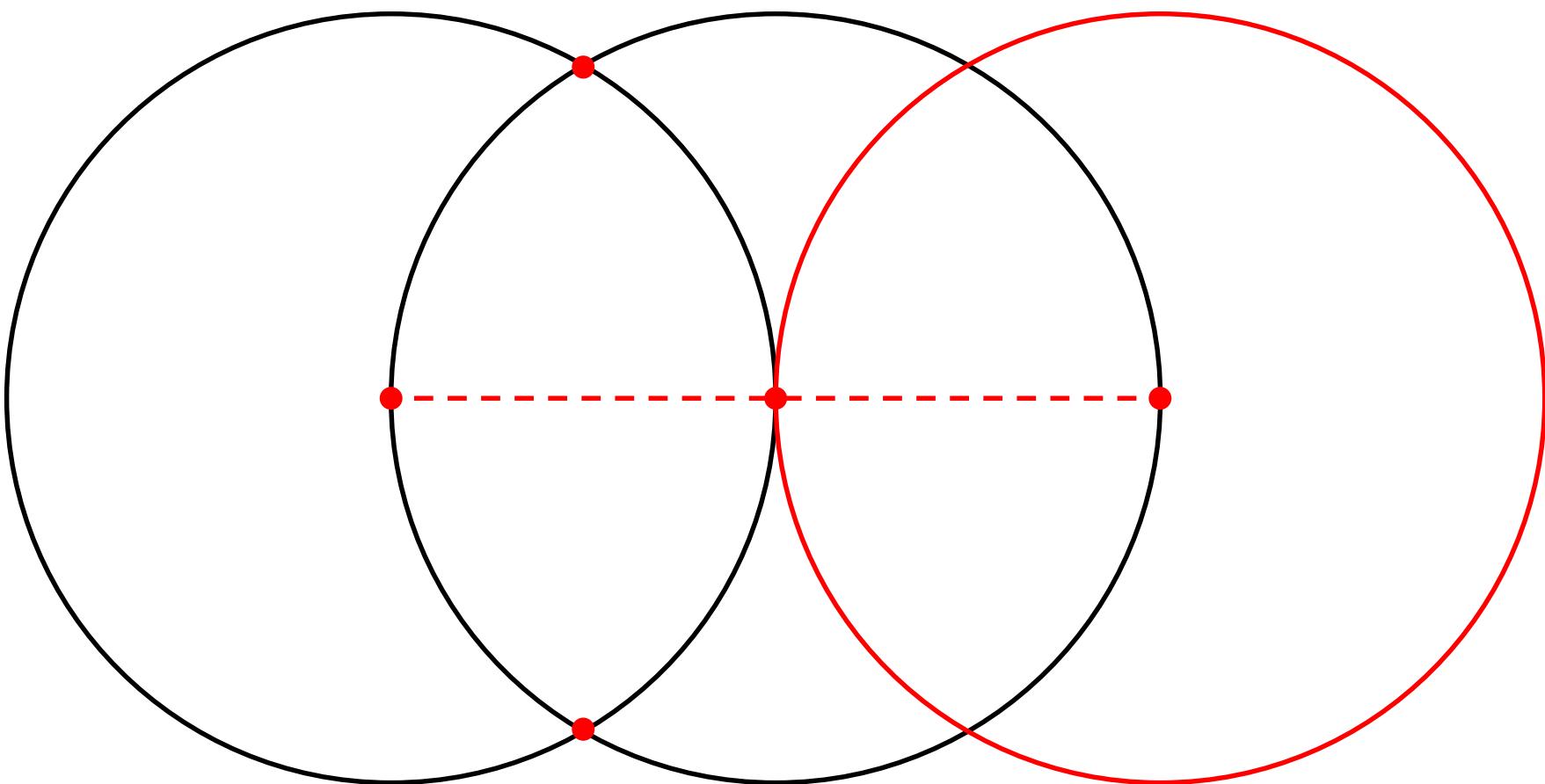


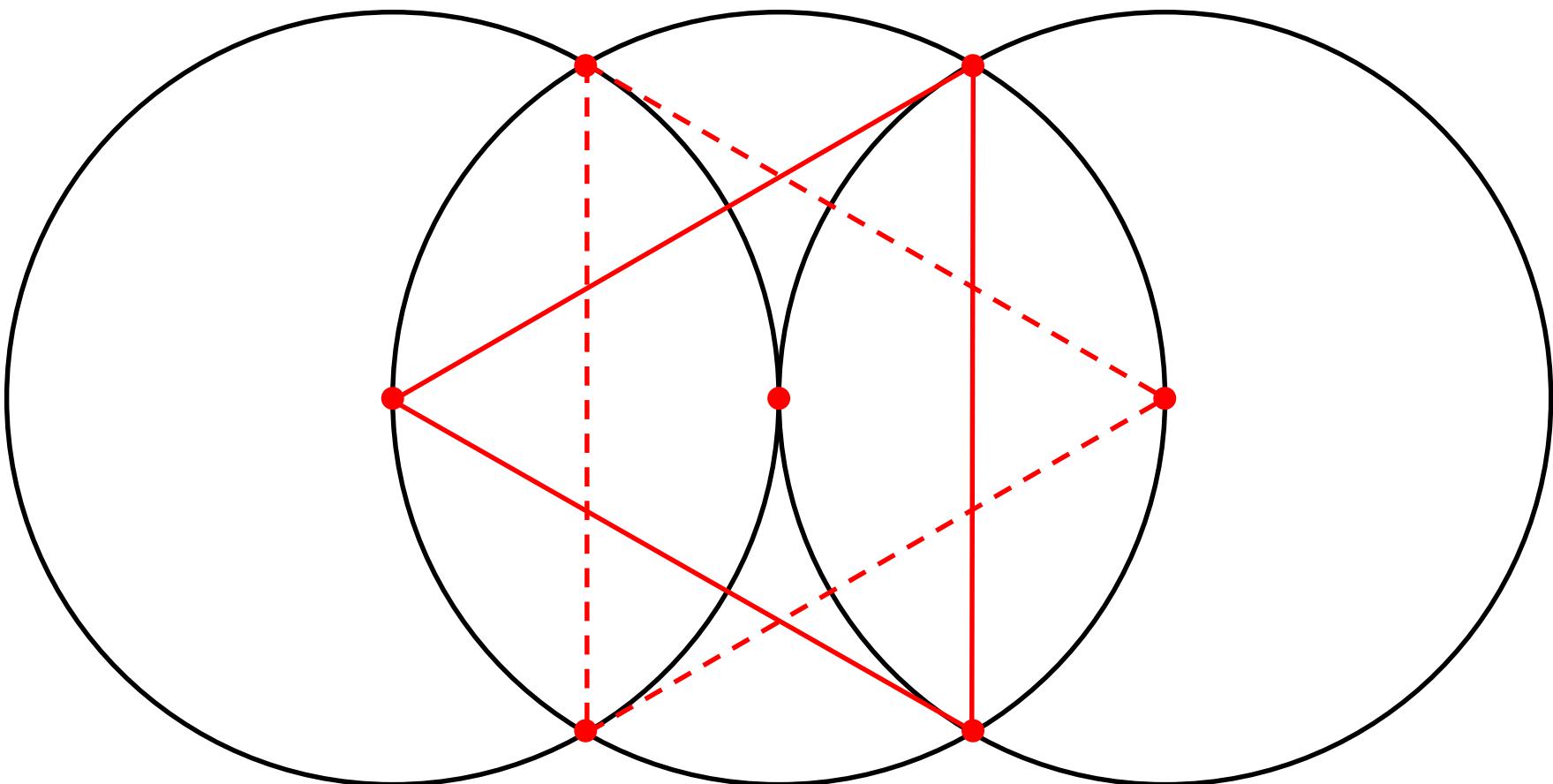
ENNEAD

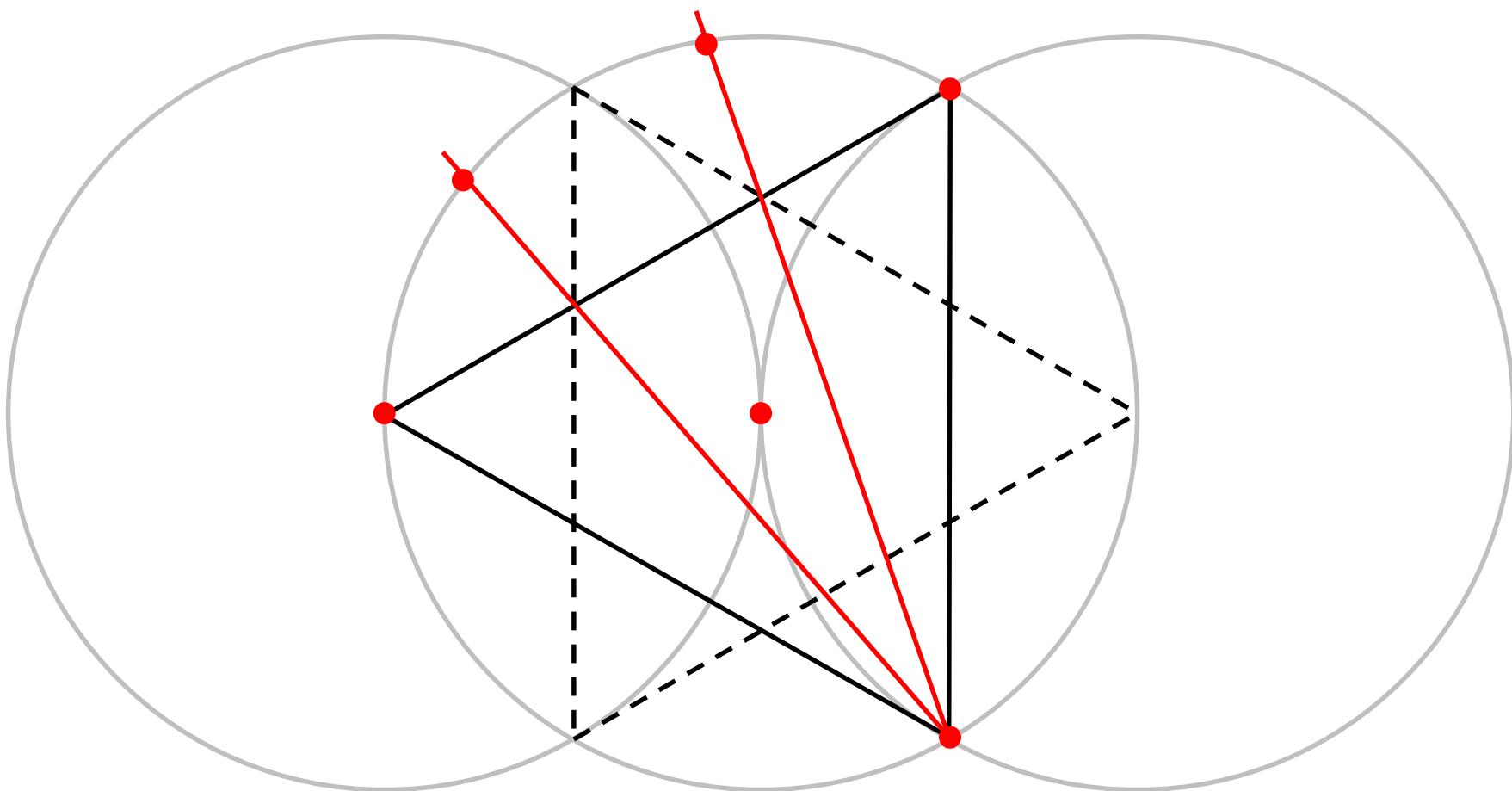
“9”

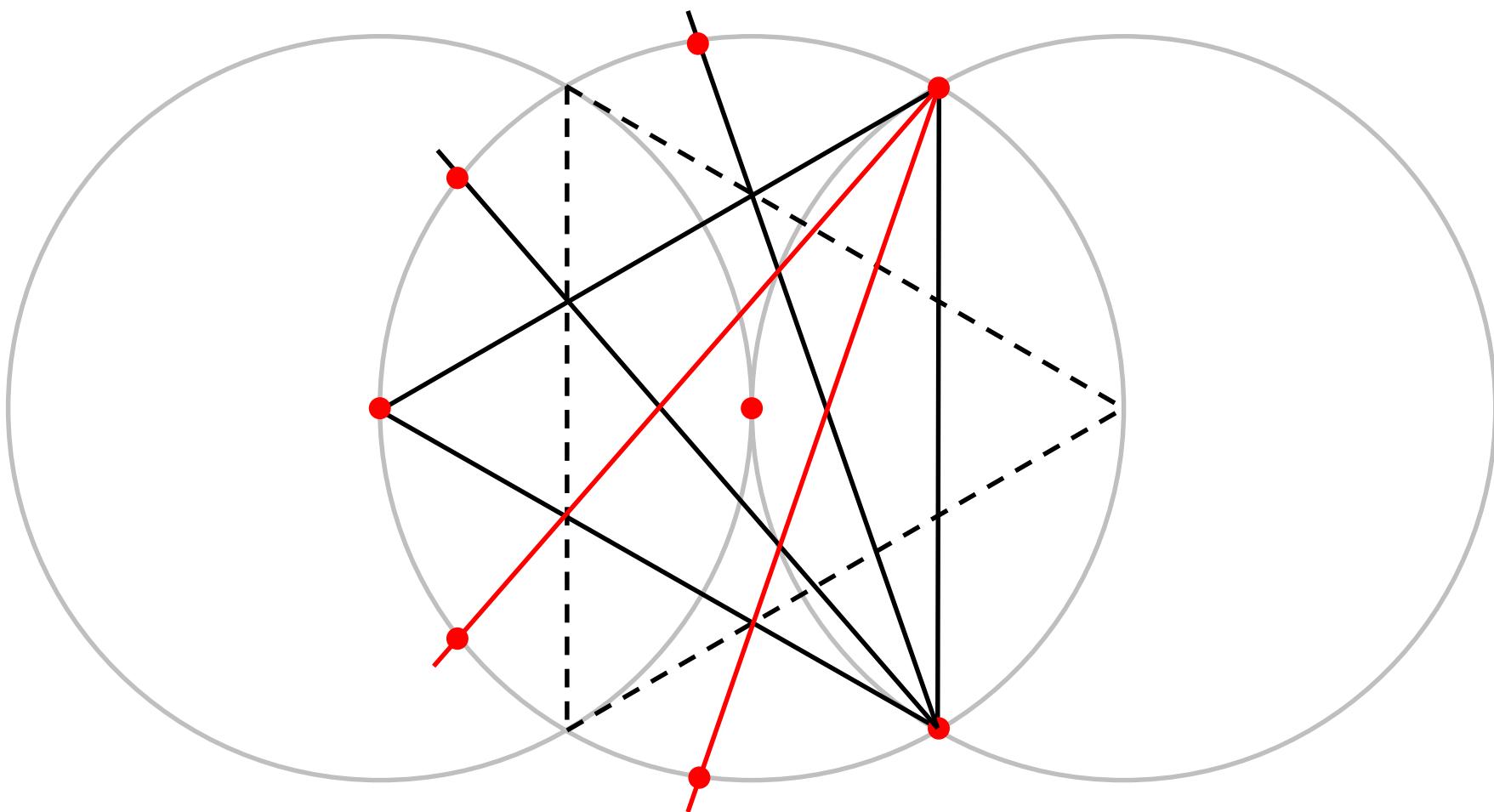


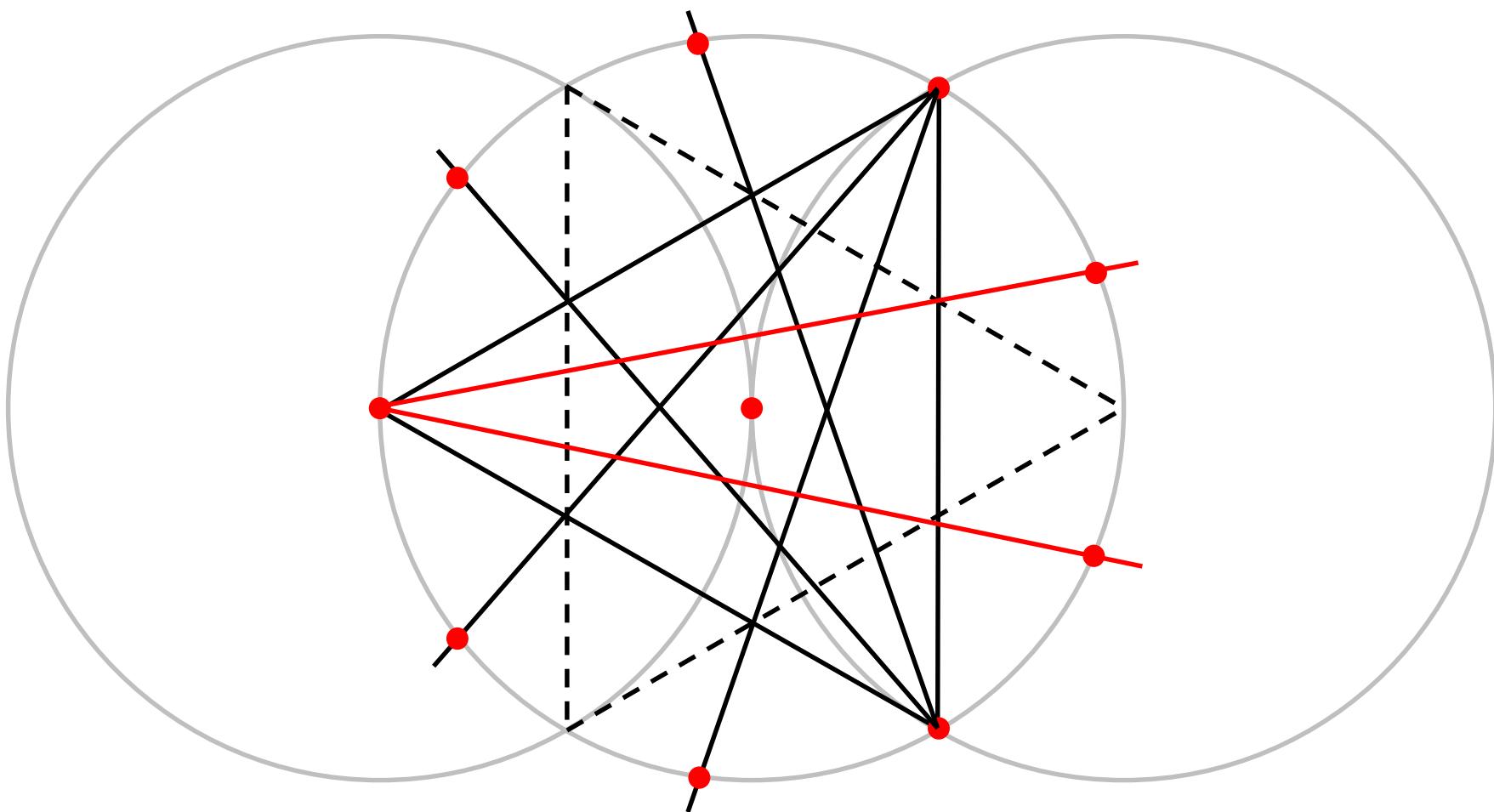
How to Construct the Nonagon

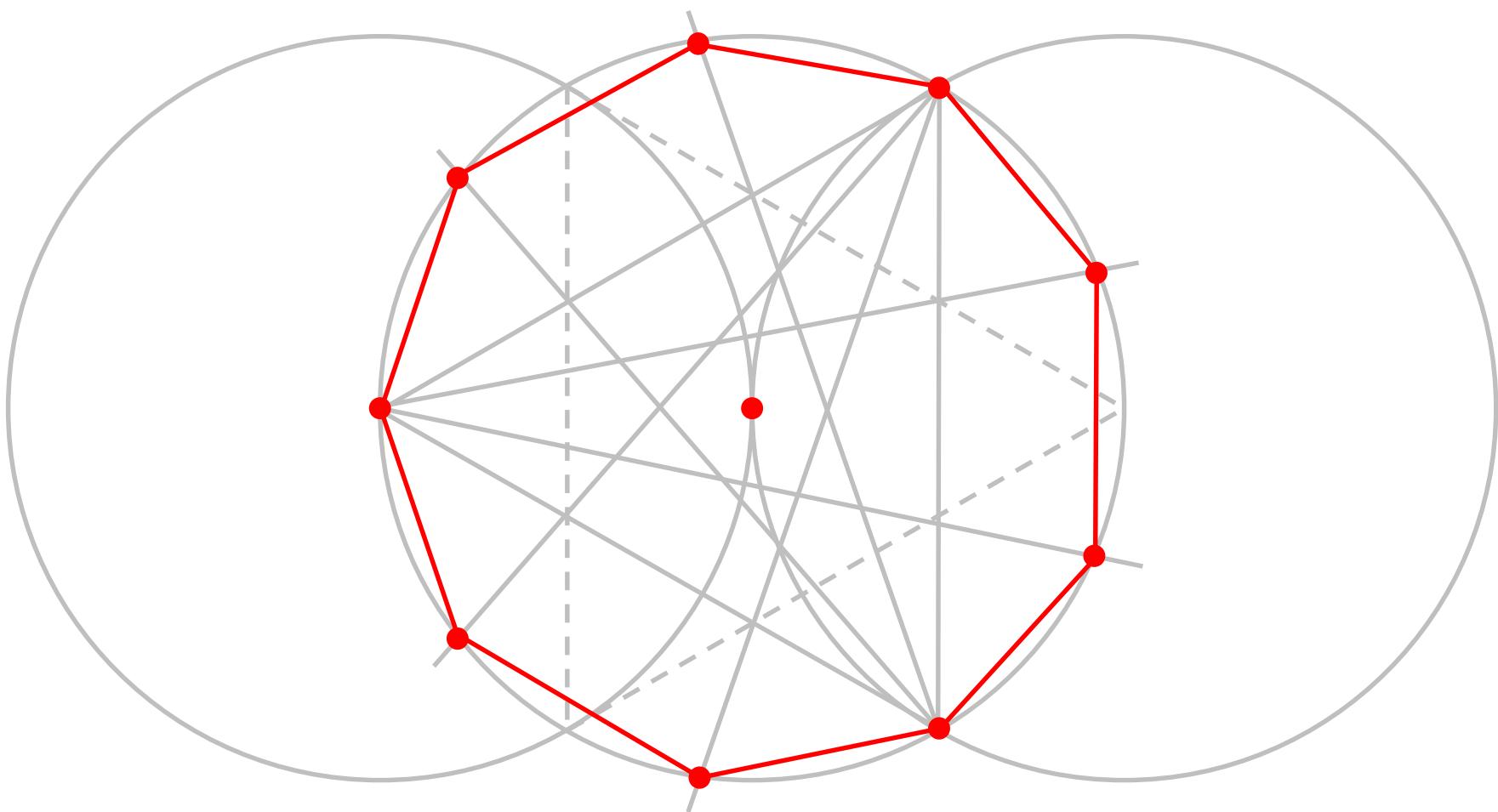






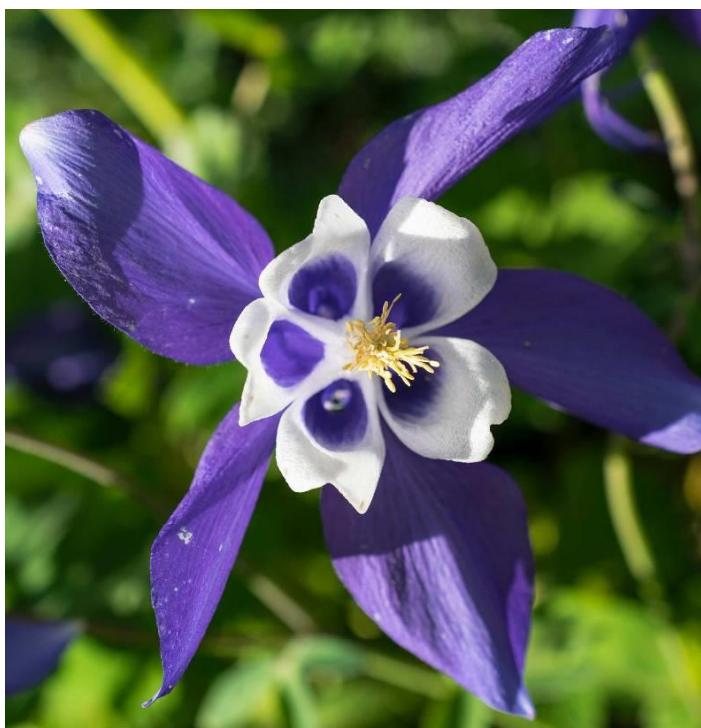
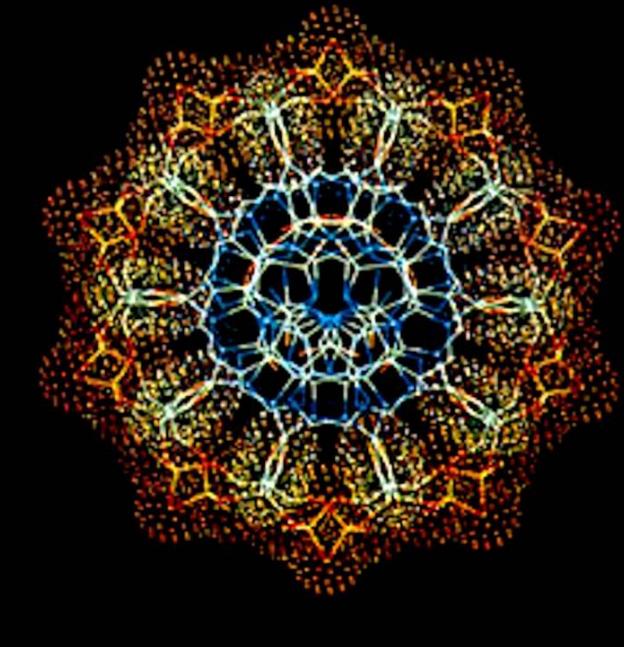
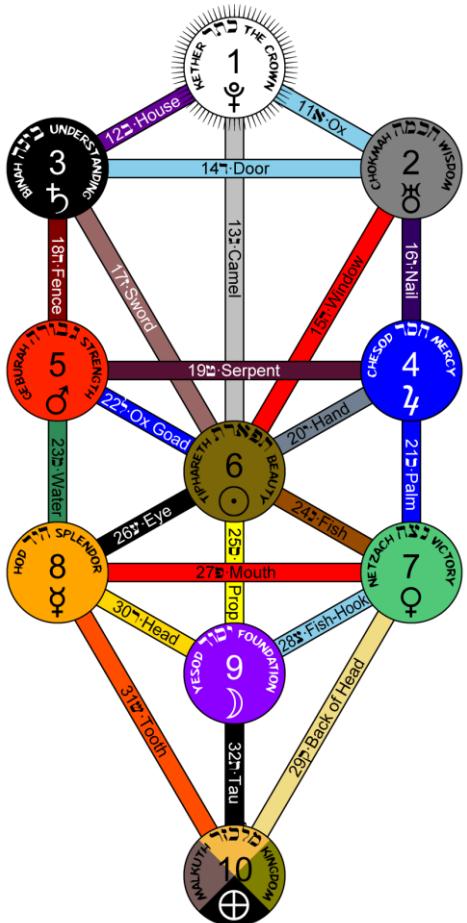
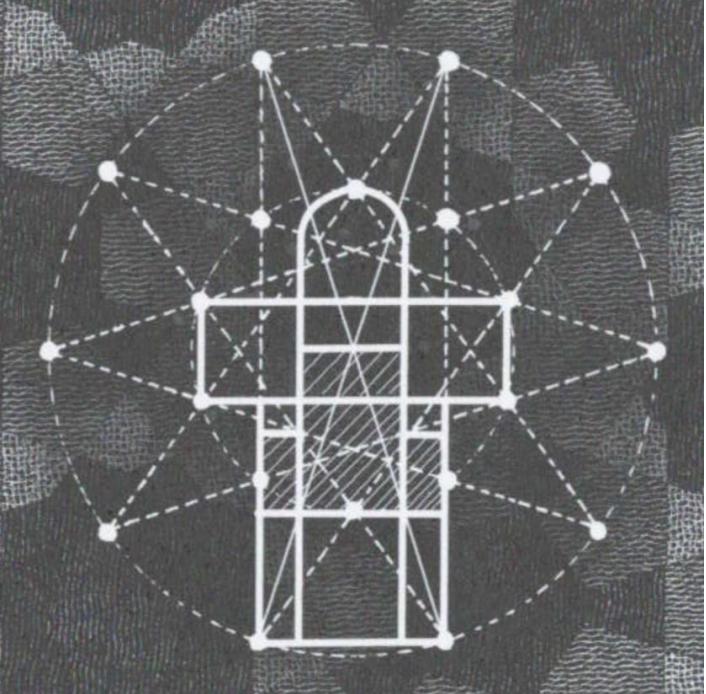




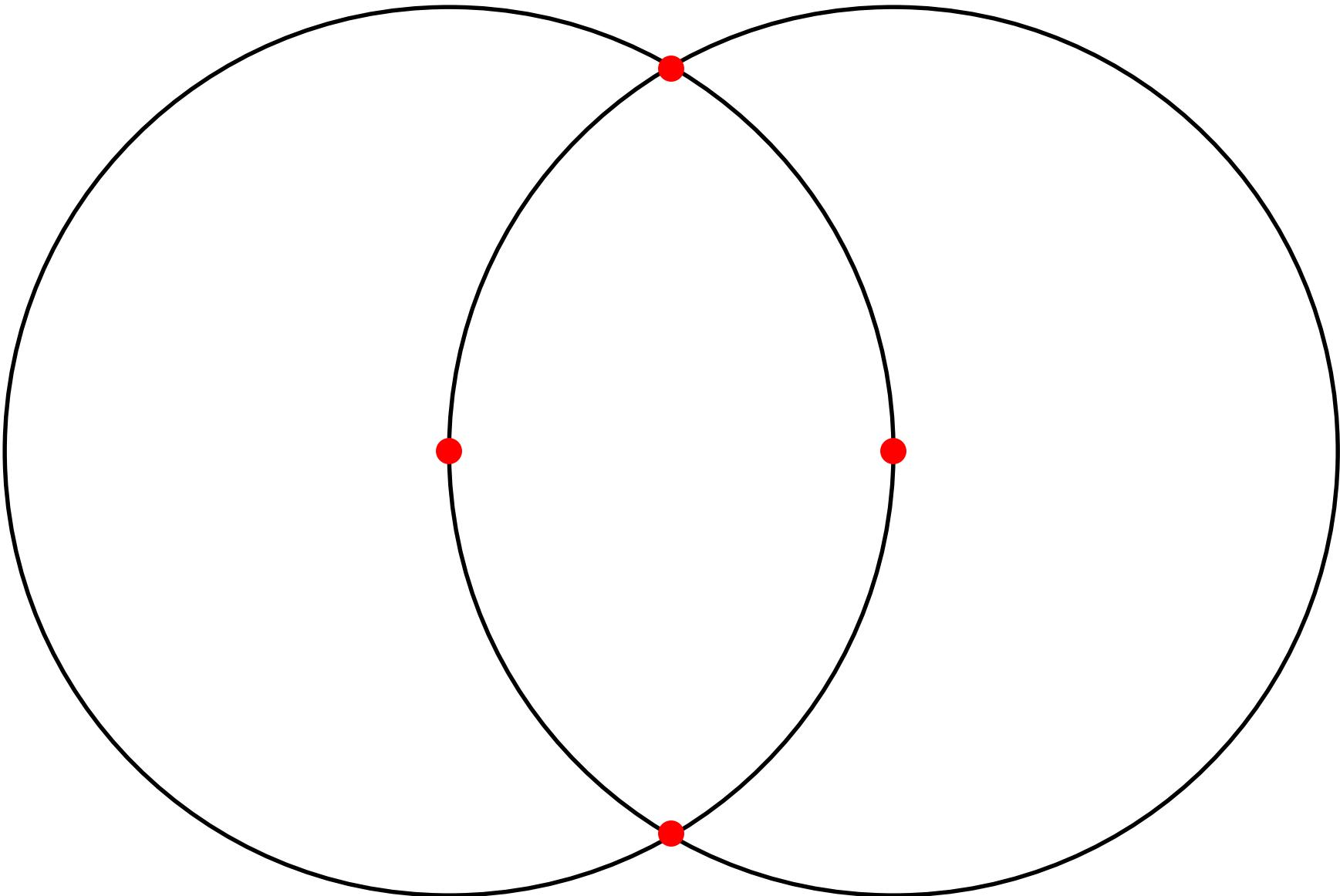


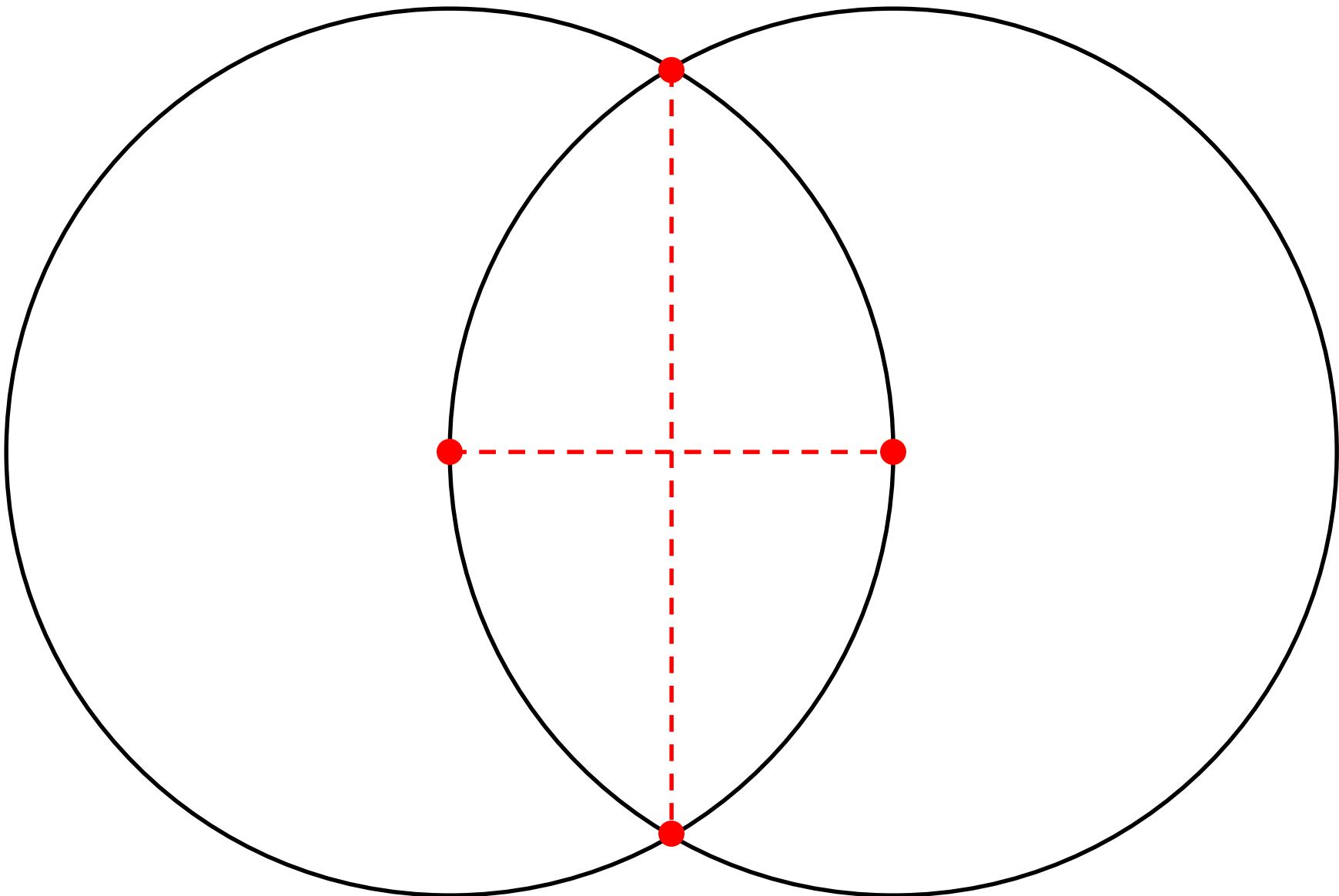
DECAD

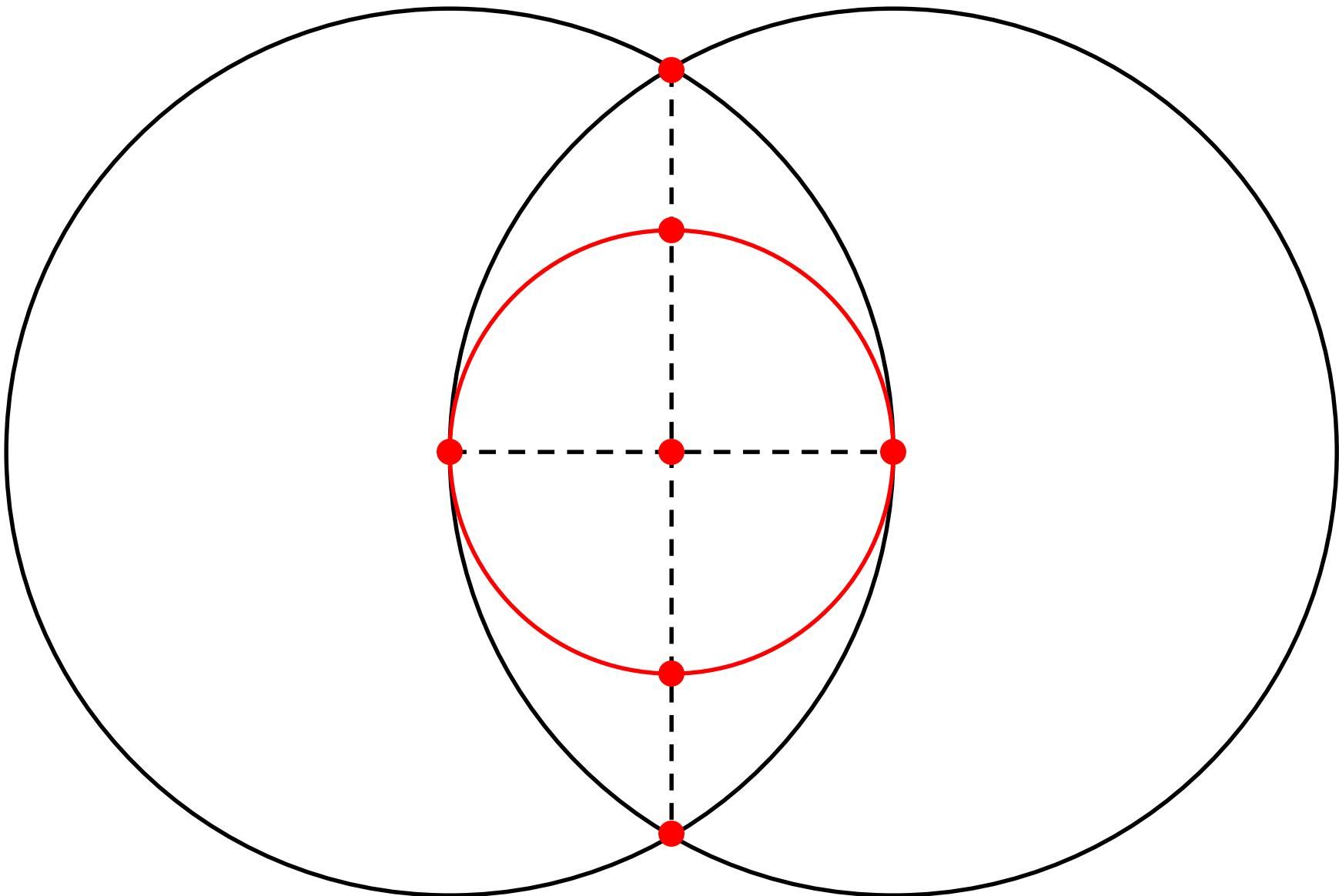
“10”

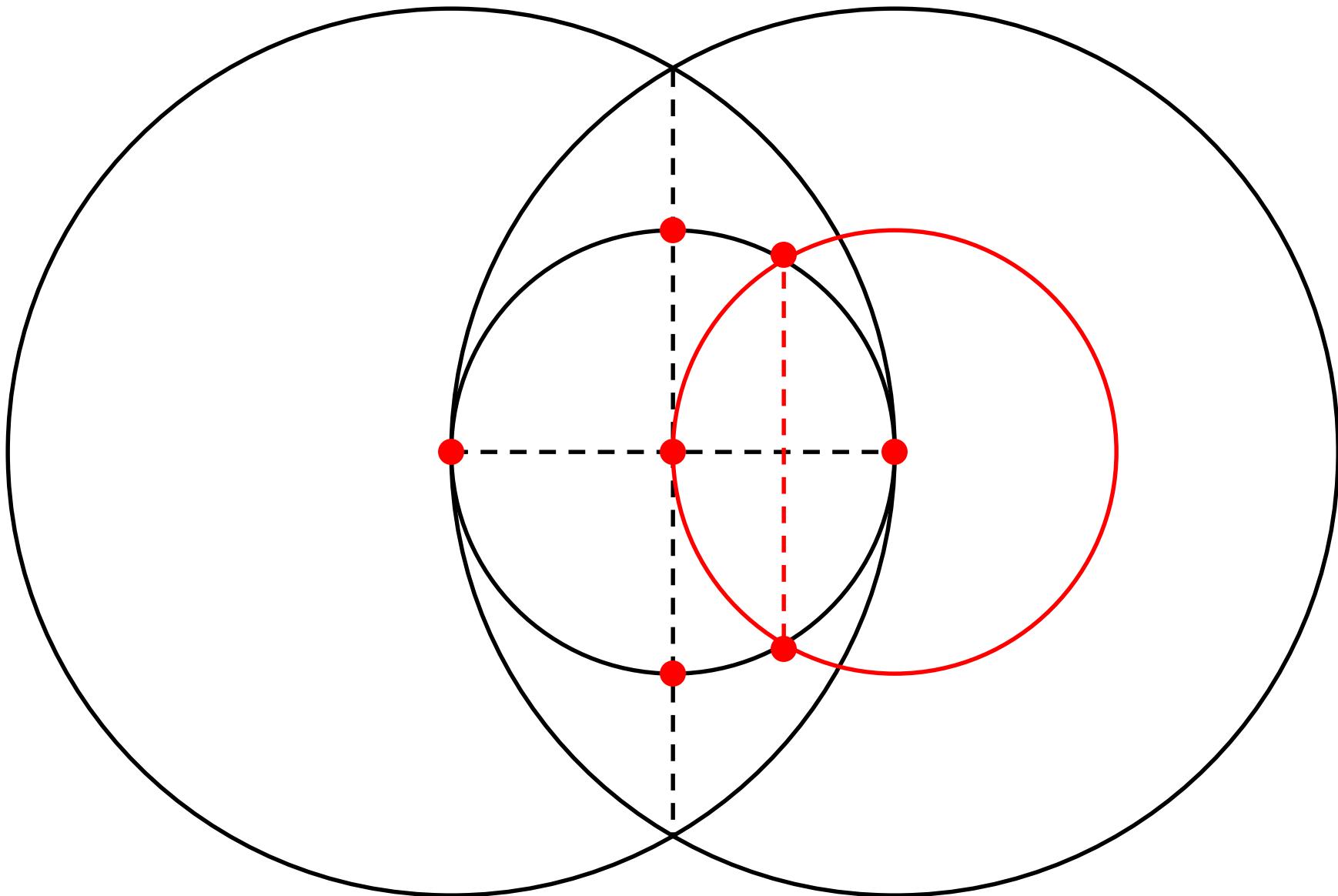


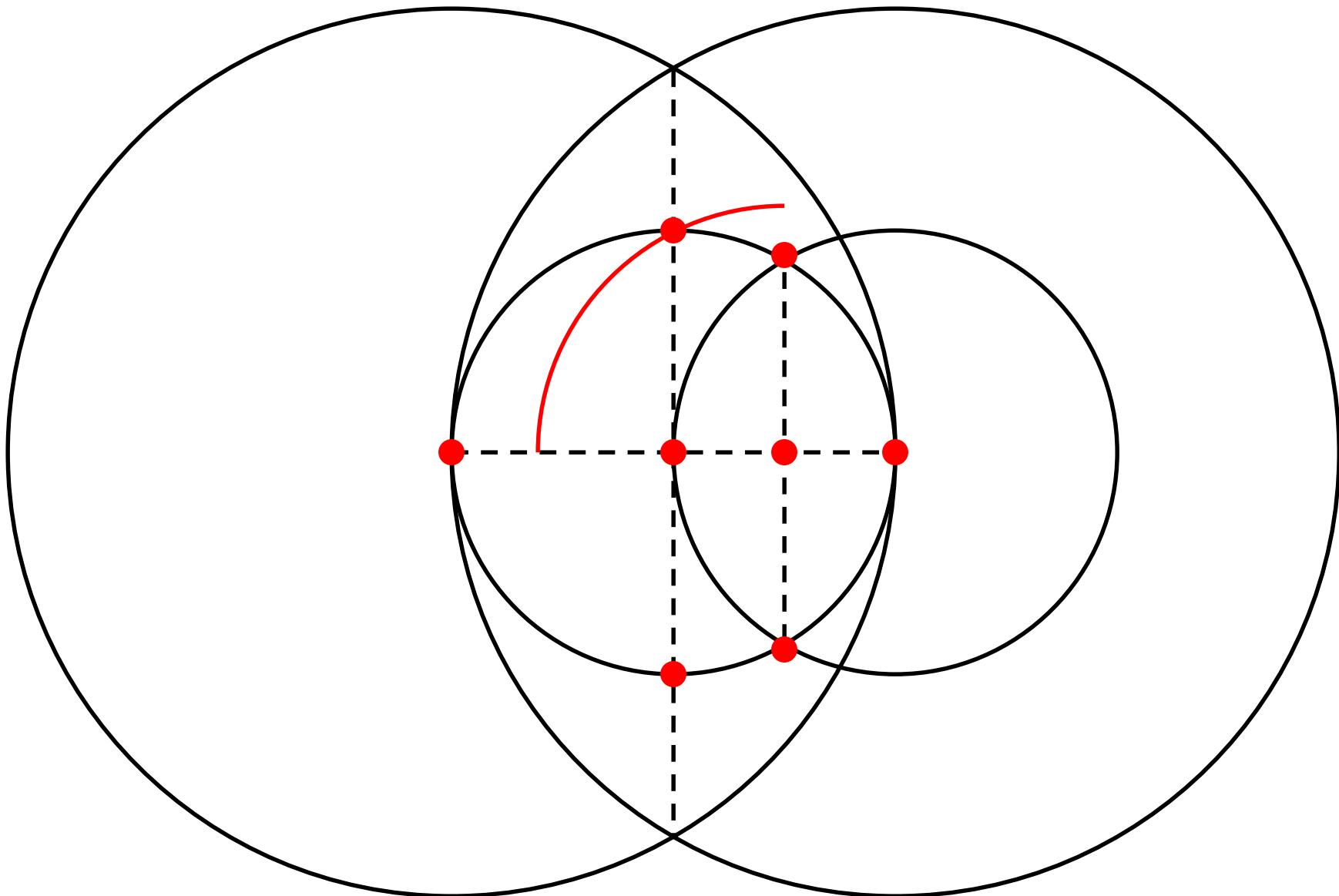
How to Construct the Decagon

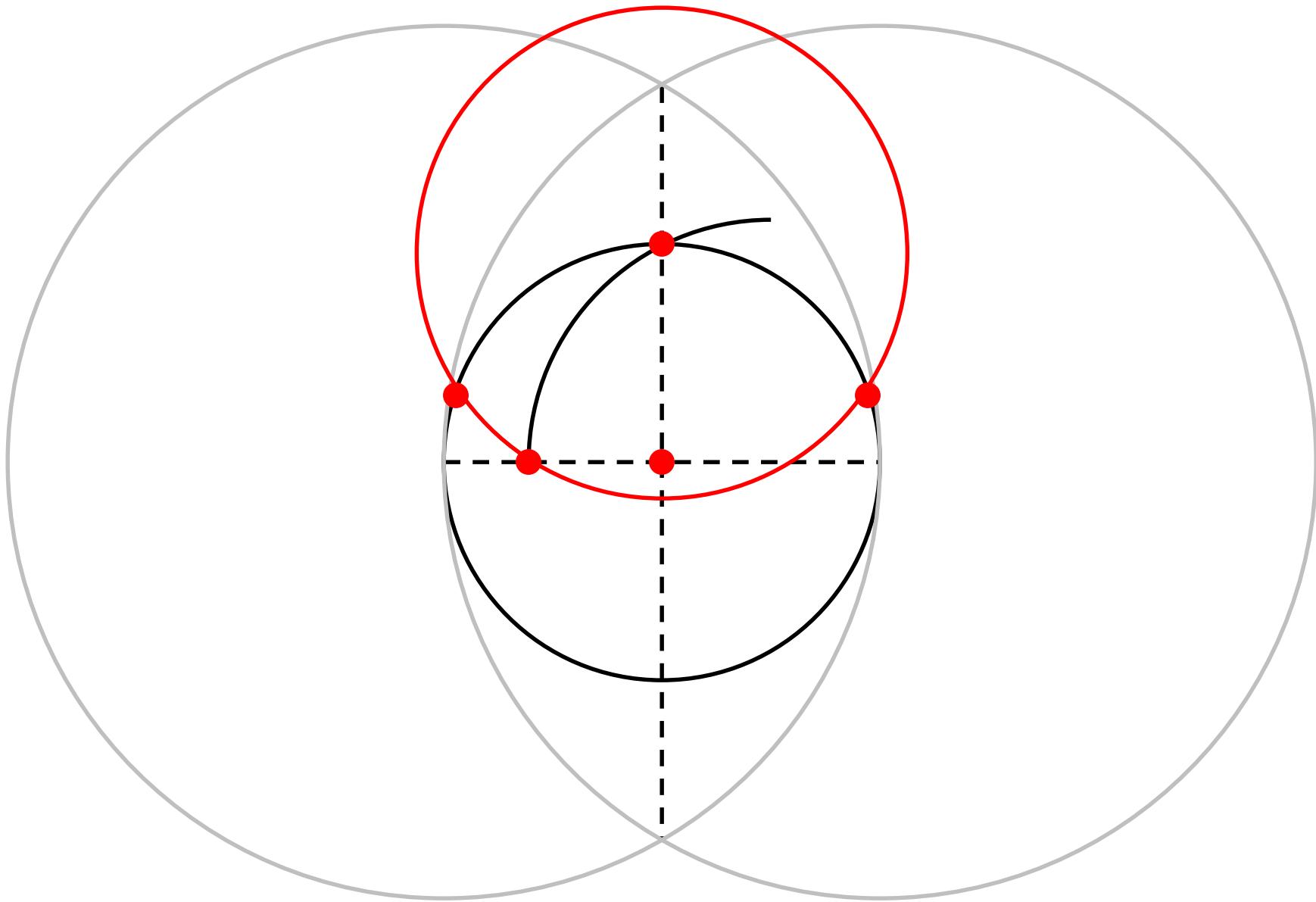


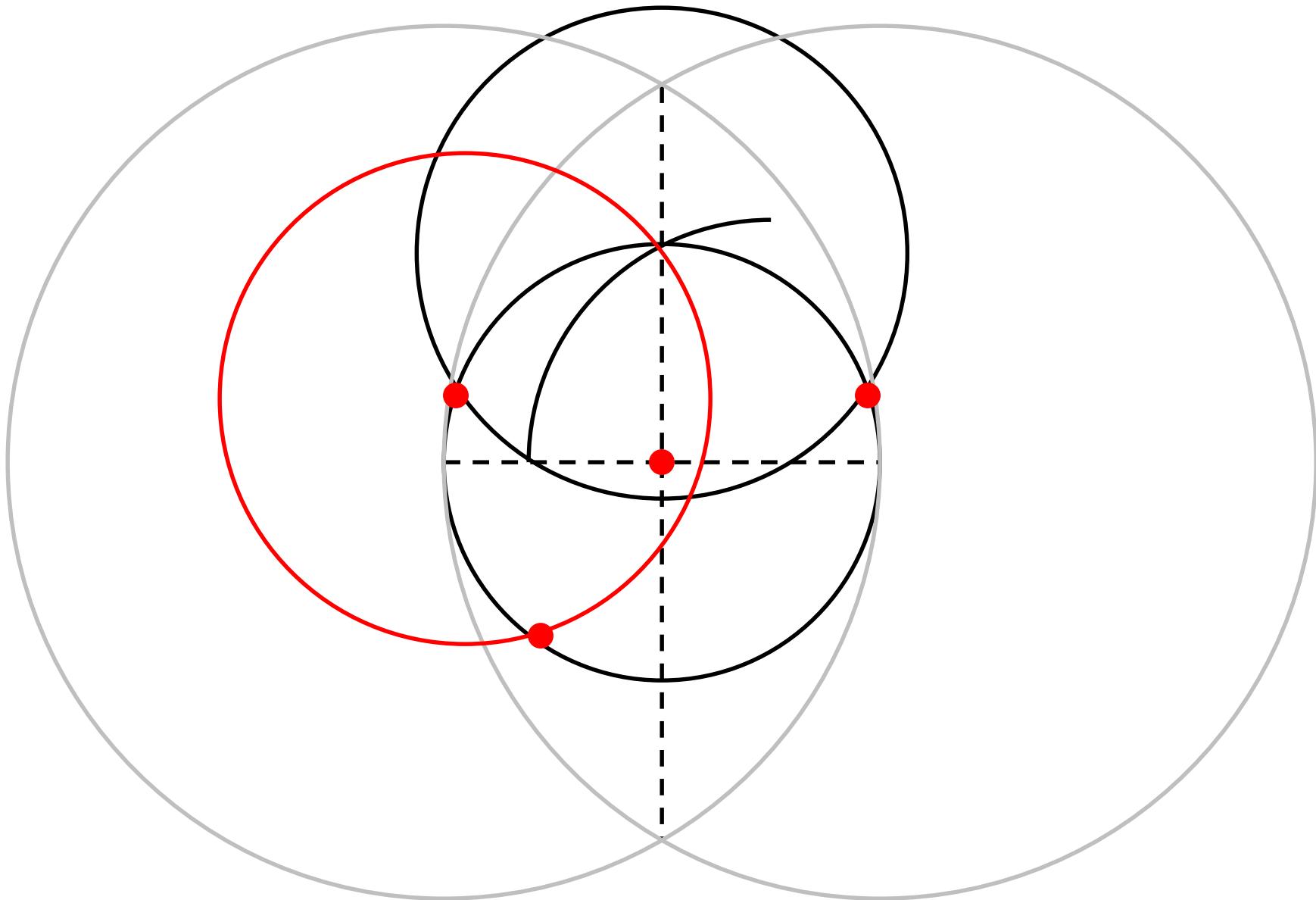


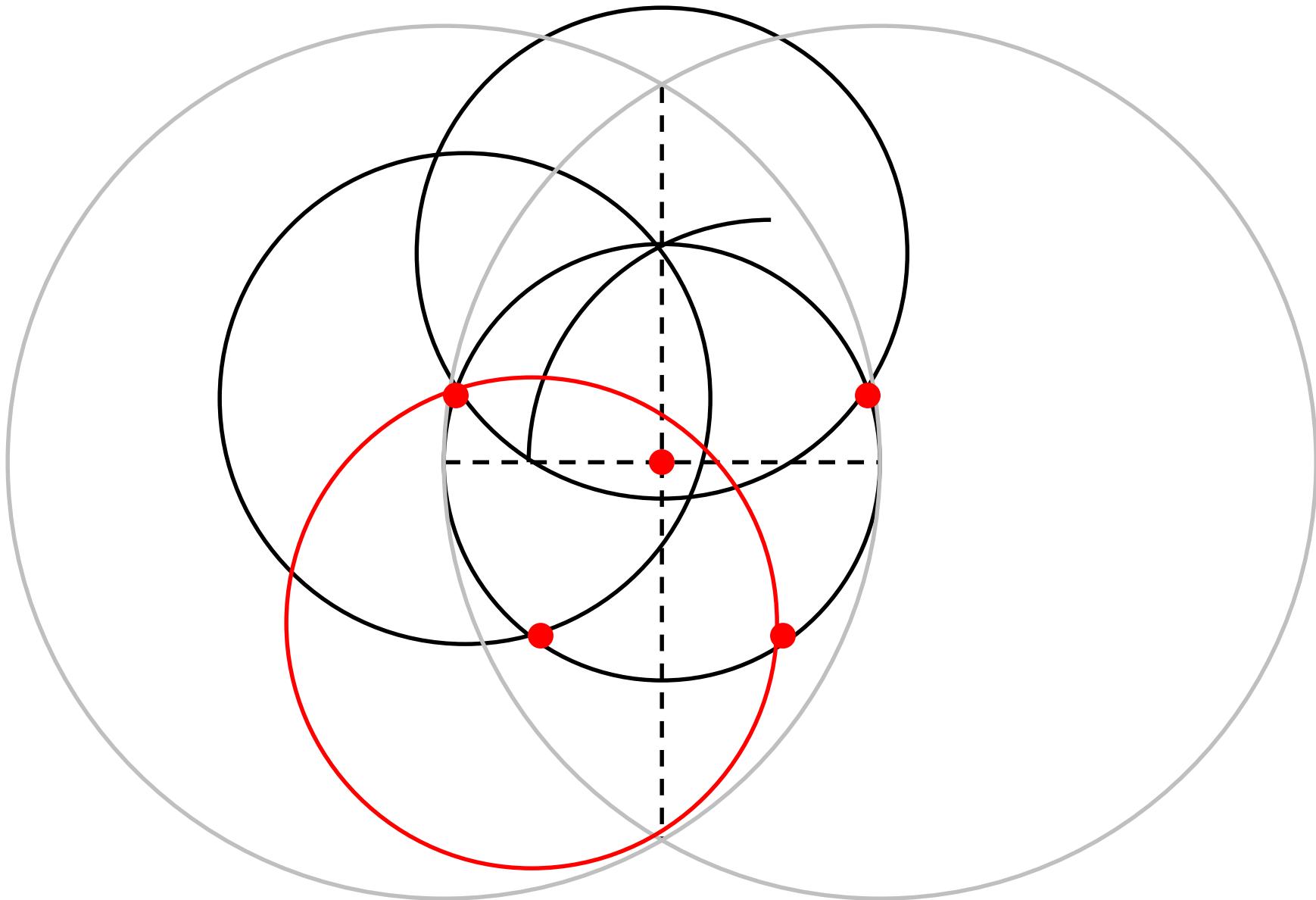


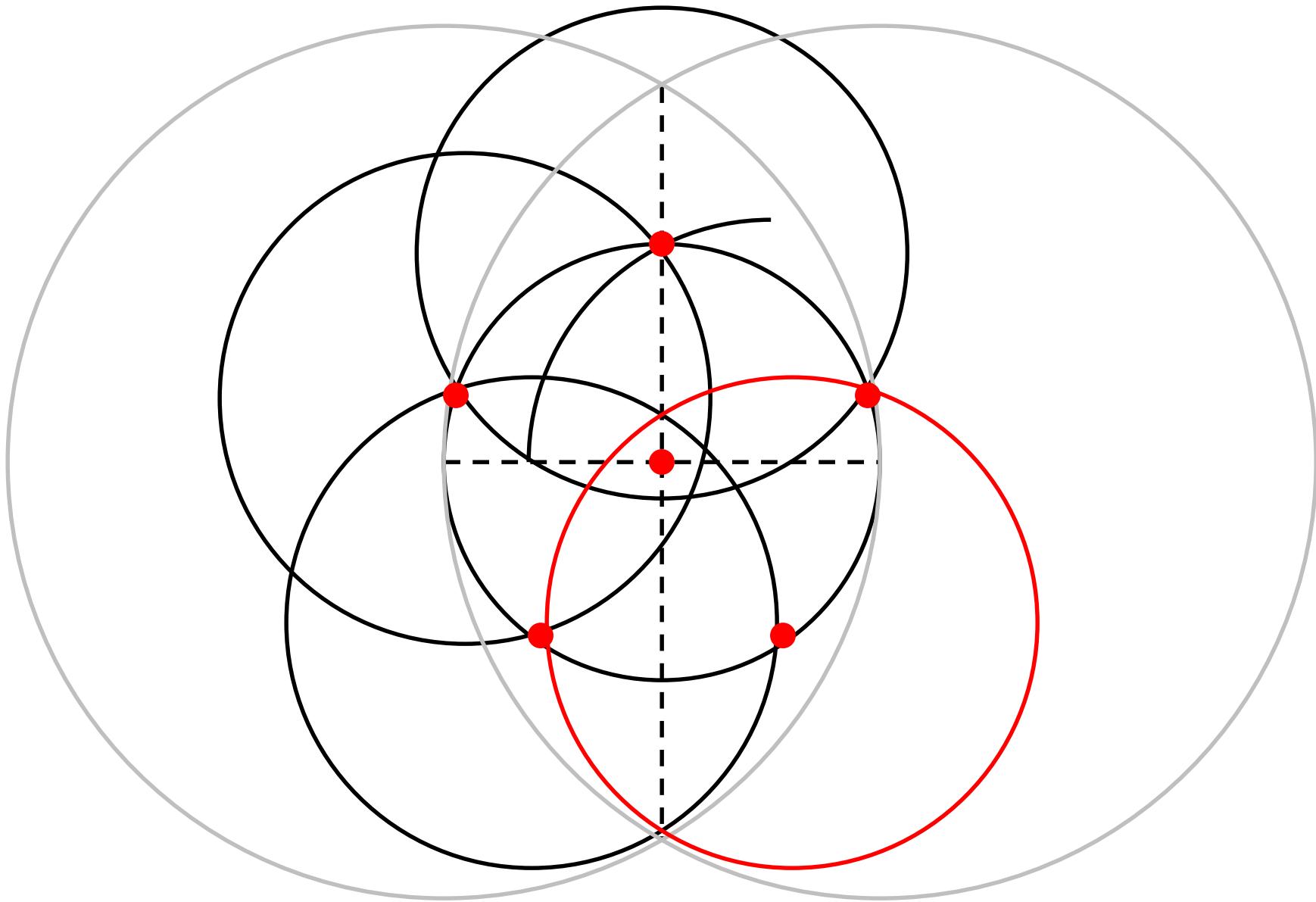


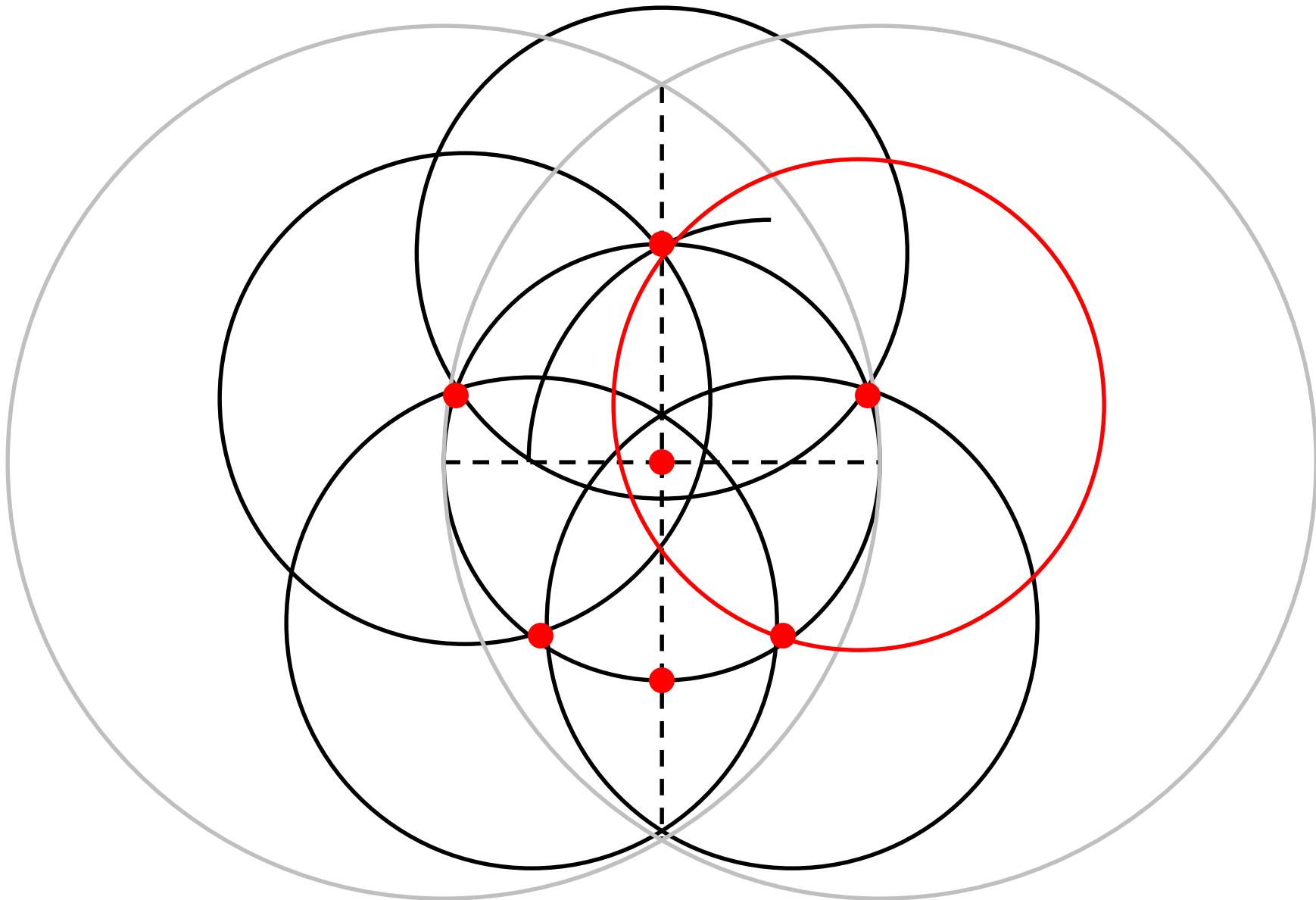


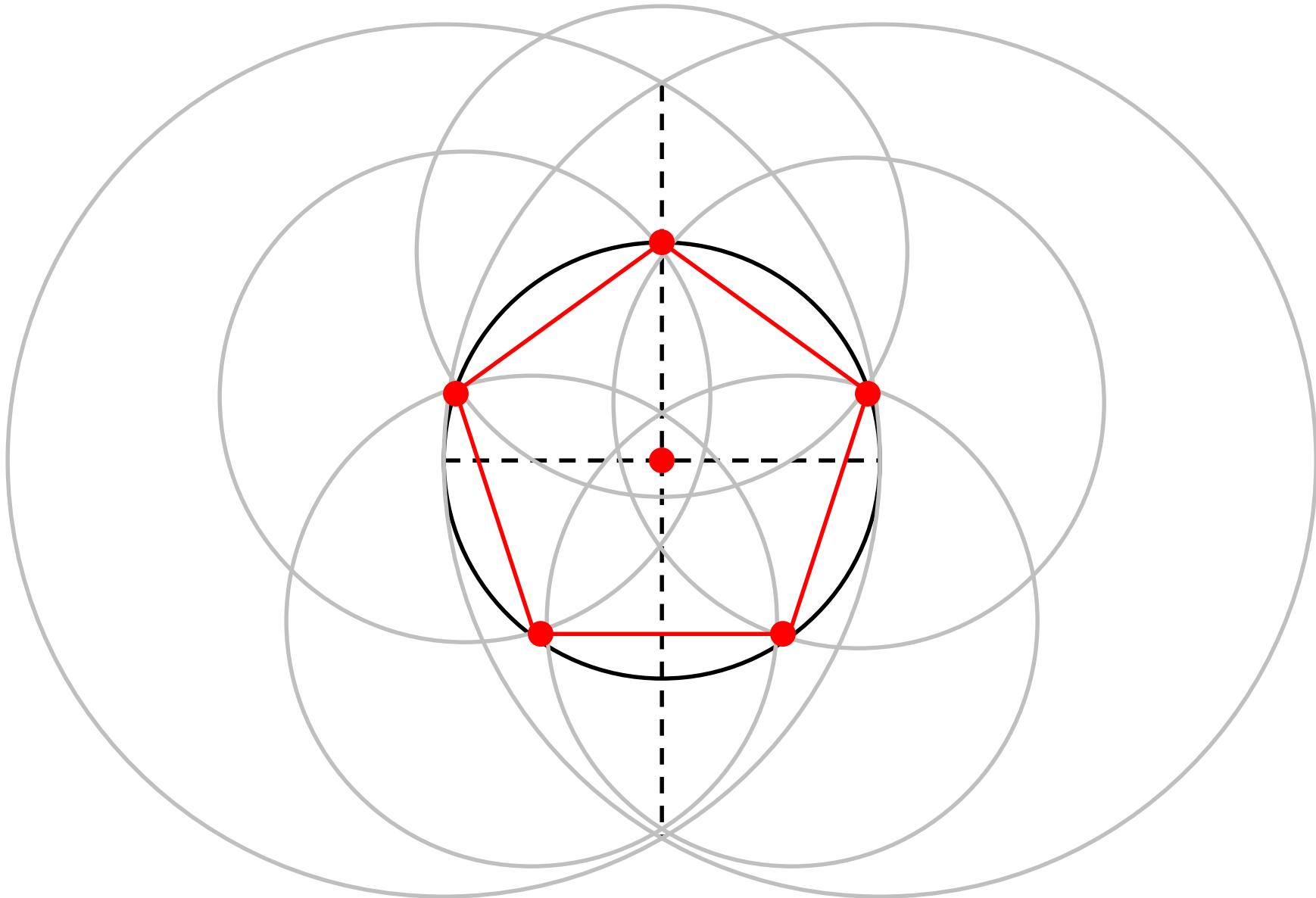


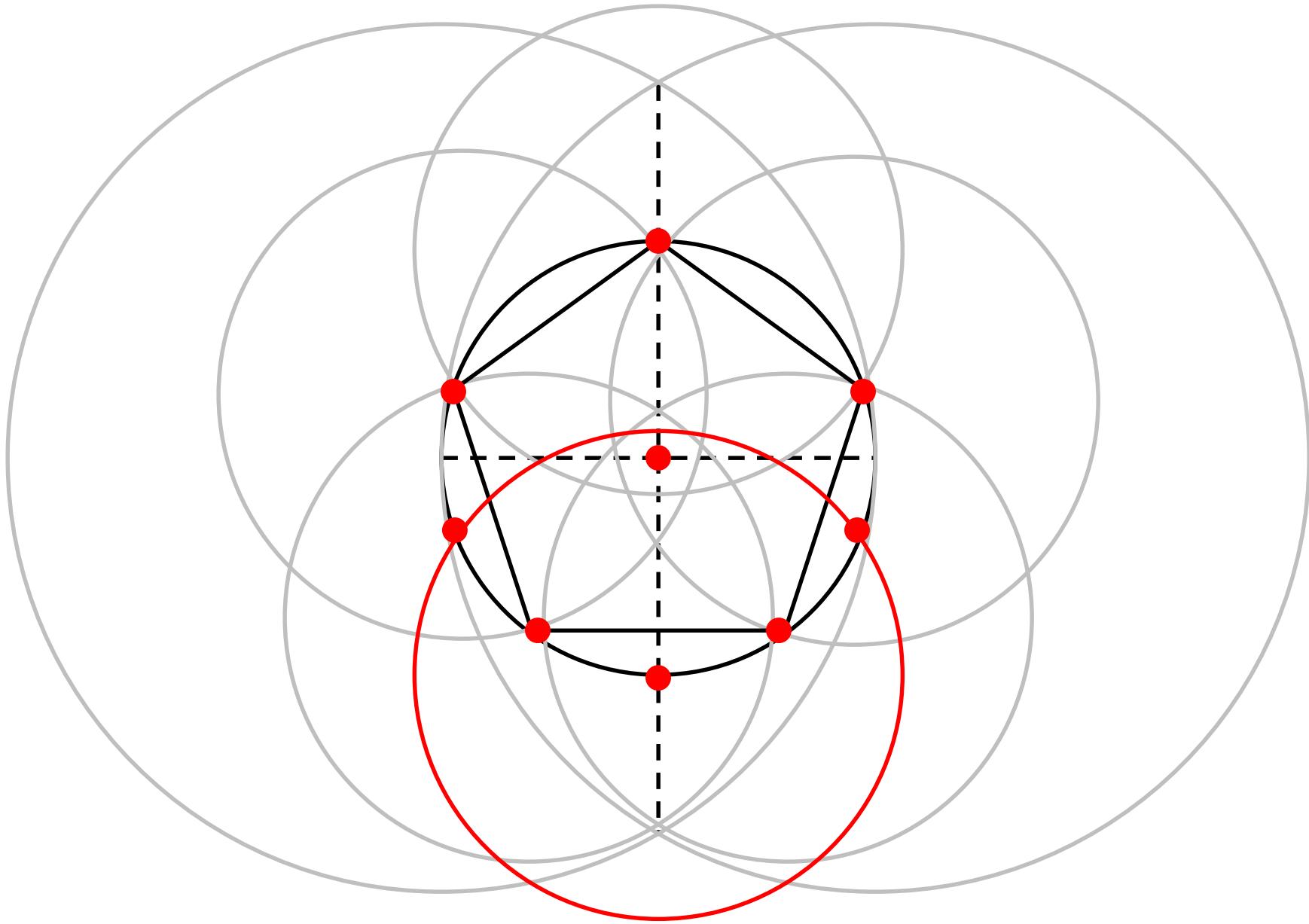


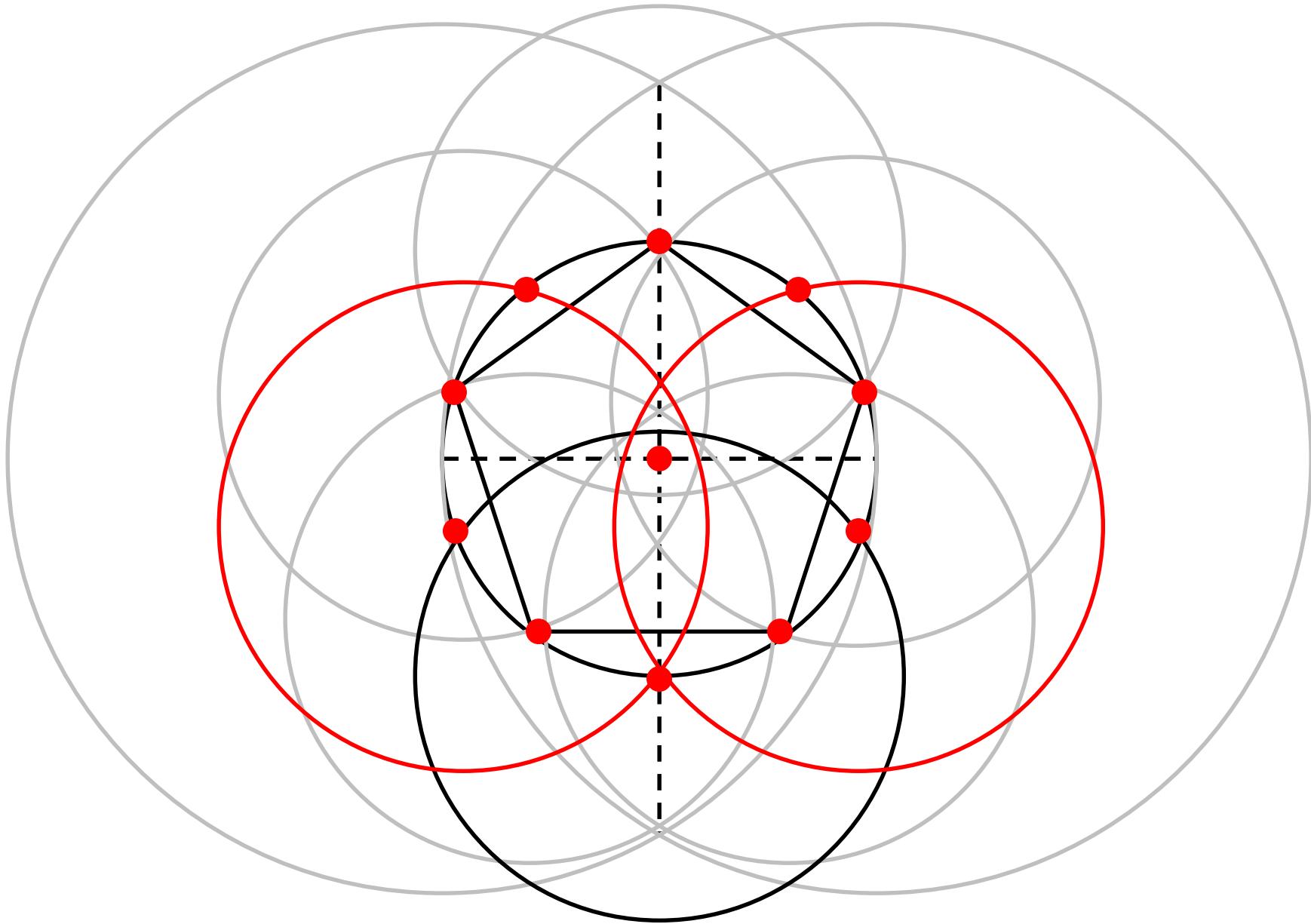


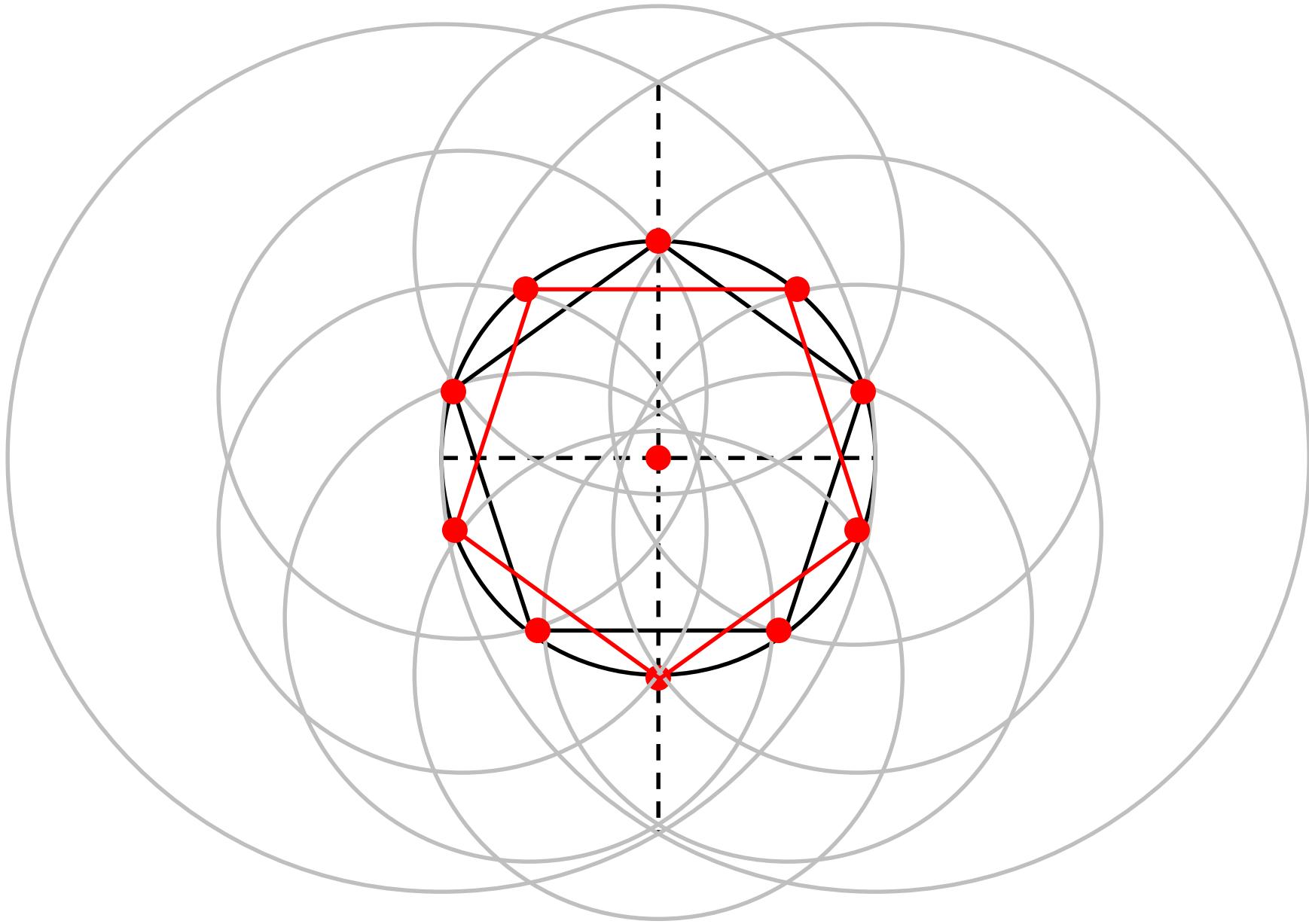






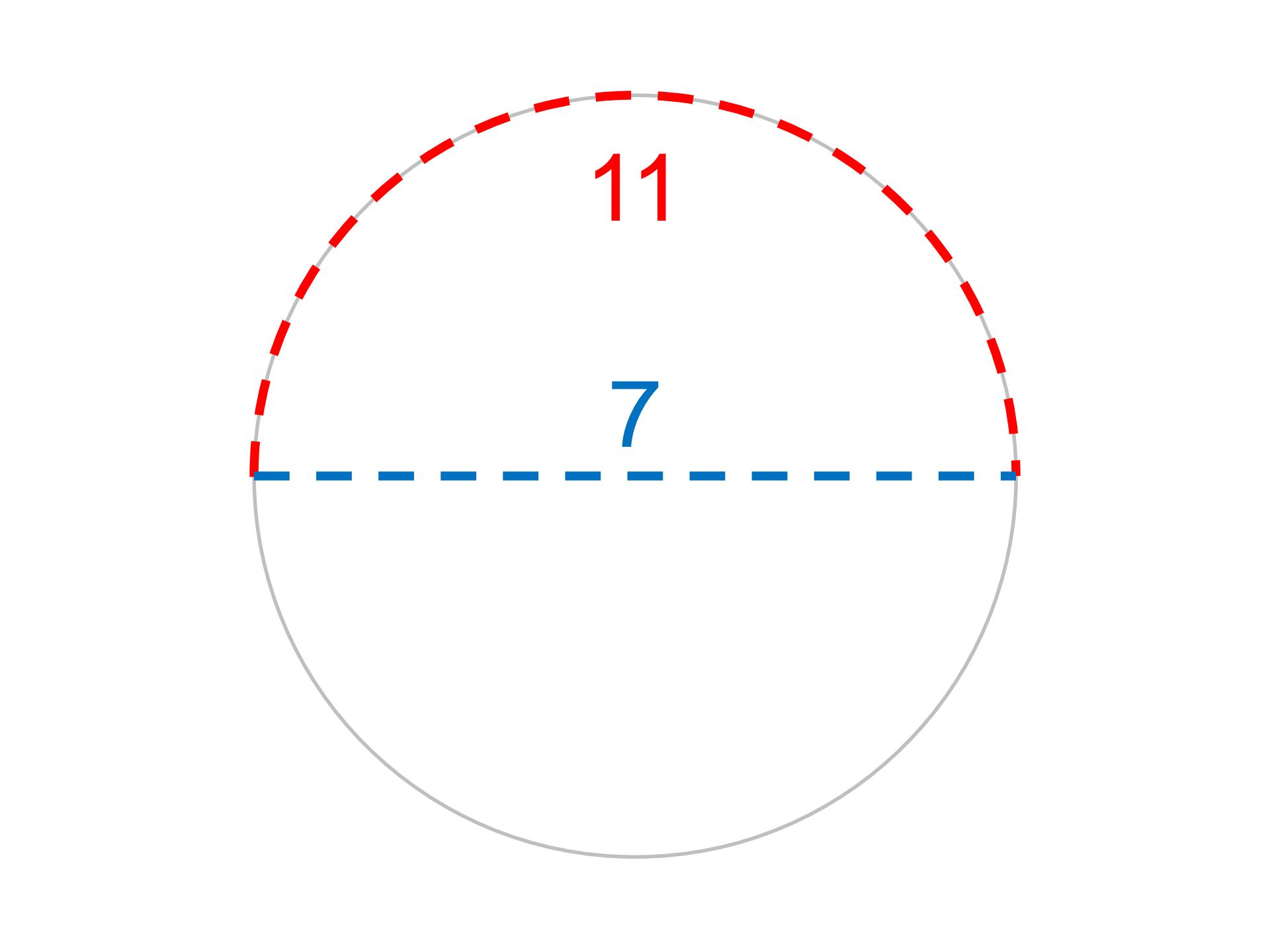






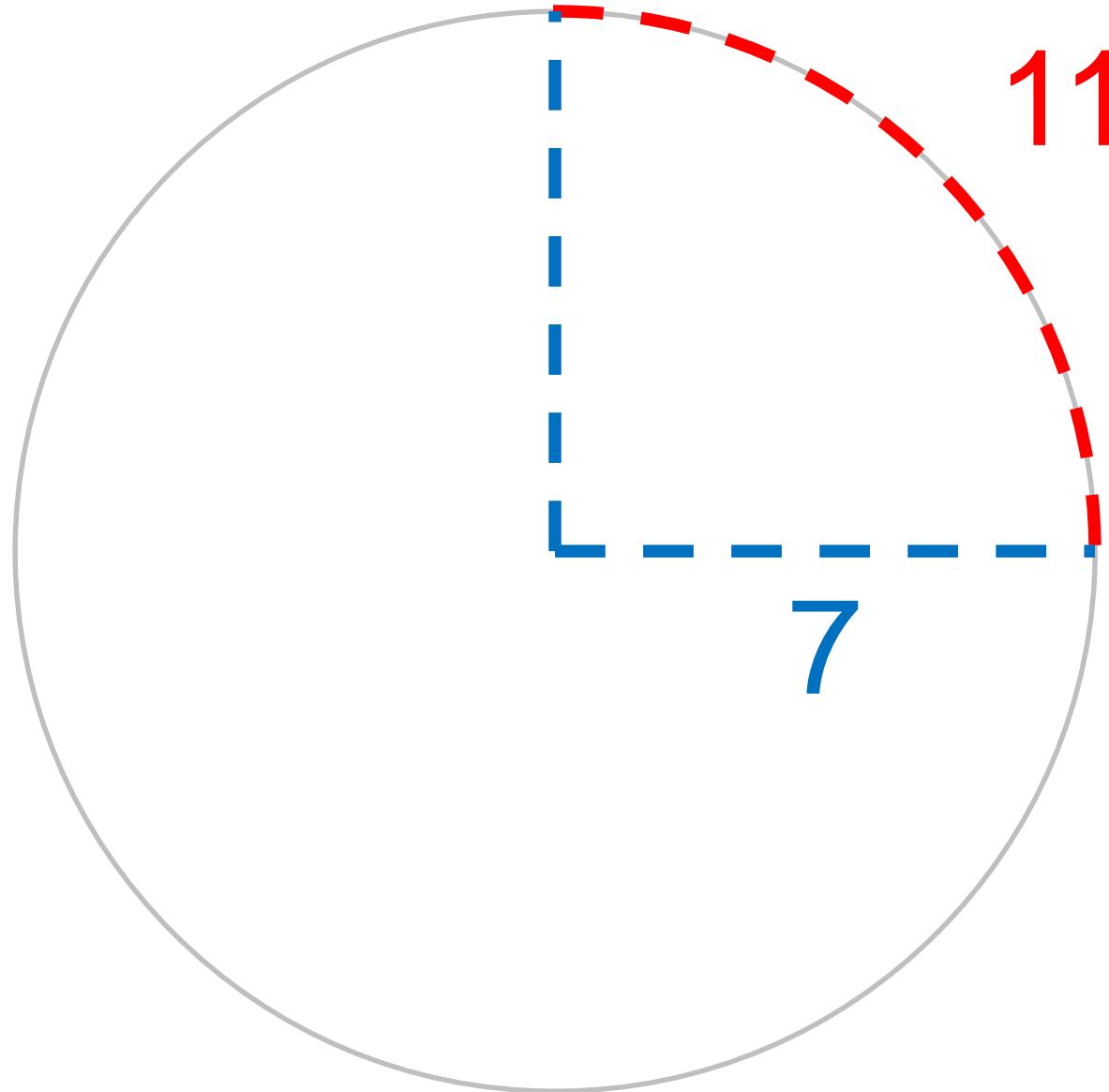
HENDECAD

“ 11 ”



11

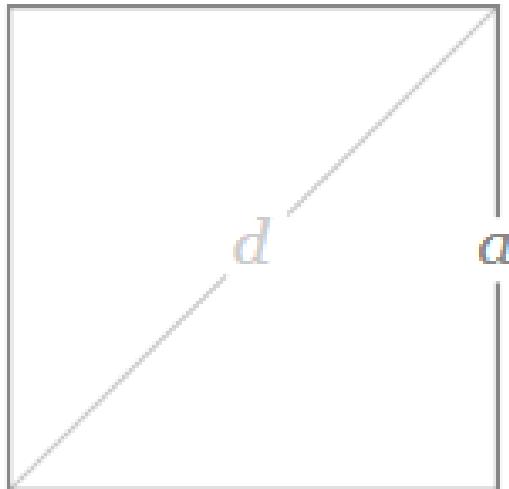
7



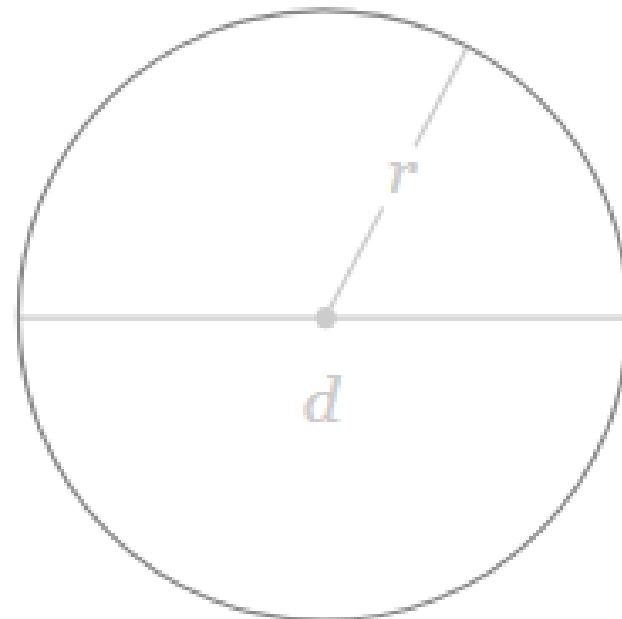
Squaring the Circle

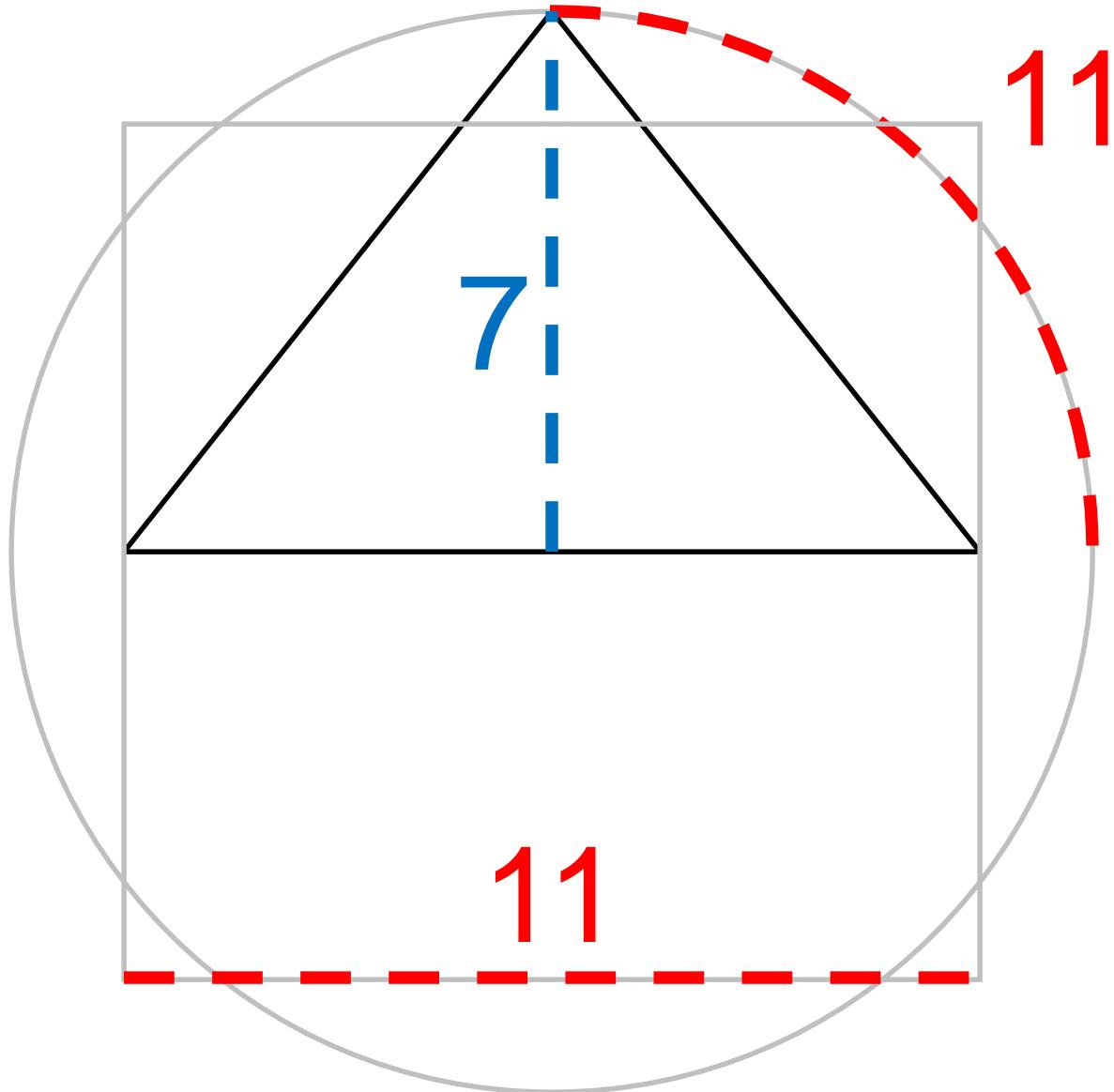
$$4a = P = 2\pi r$$

$$P = 4a$$



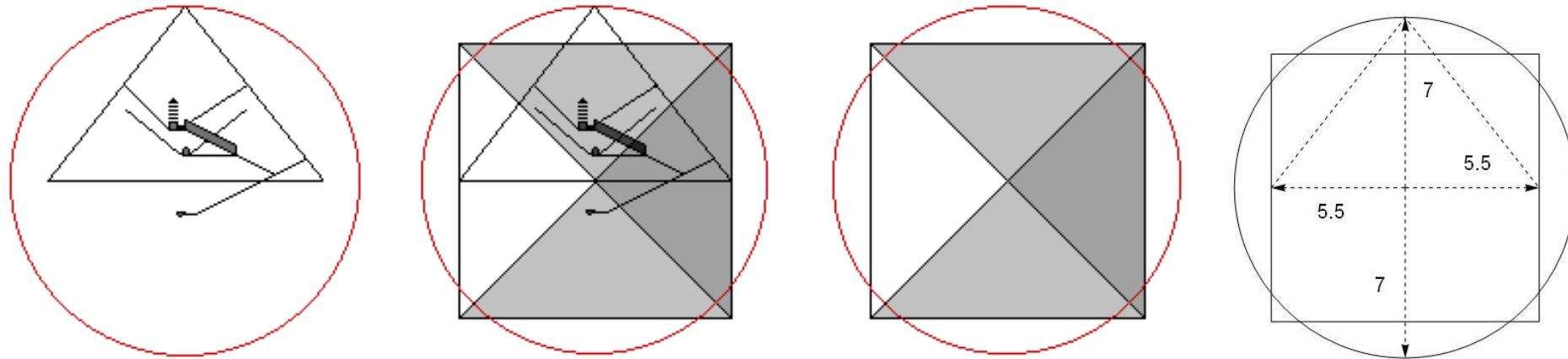
$$C = 2\pi r$$



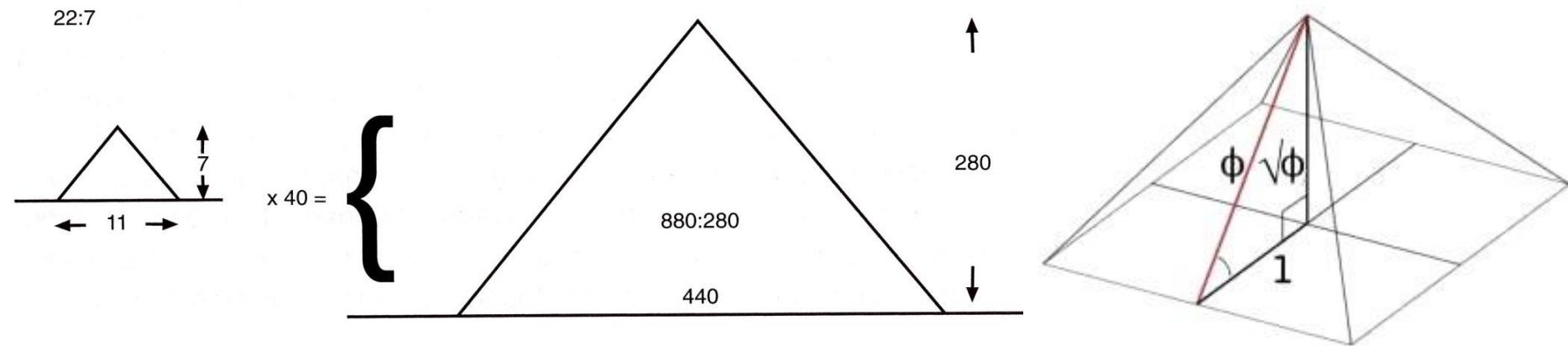


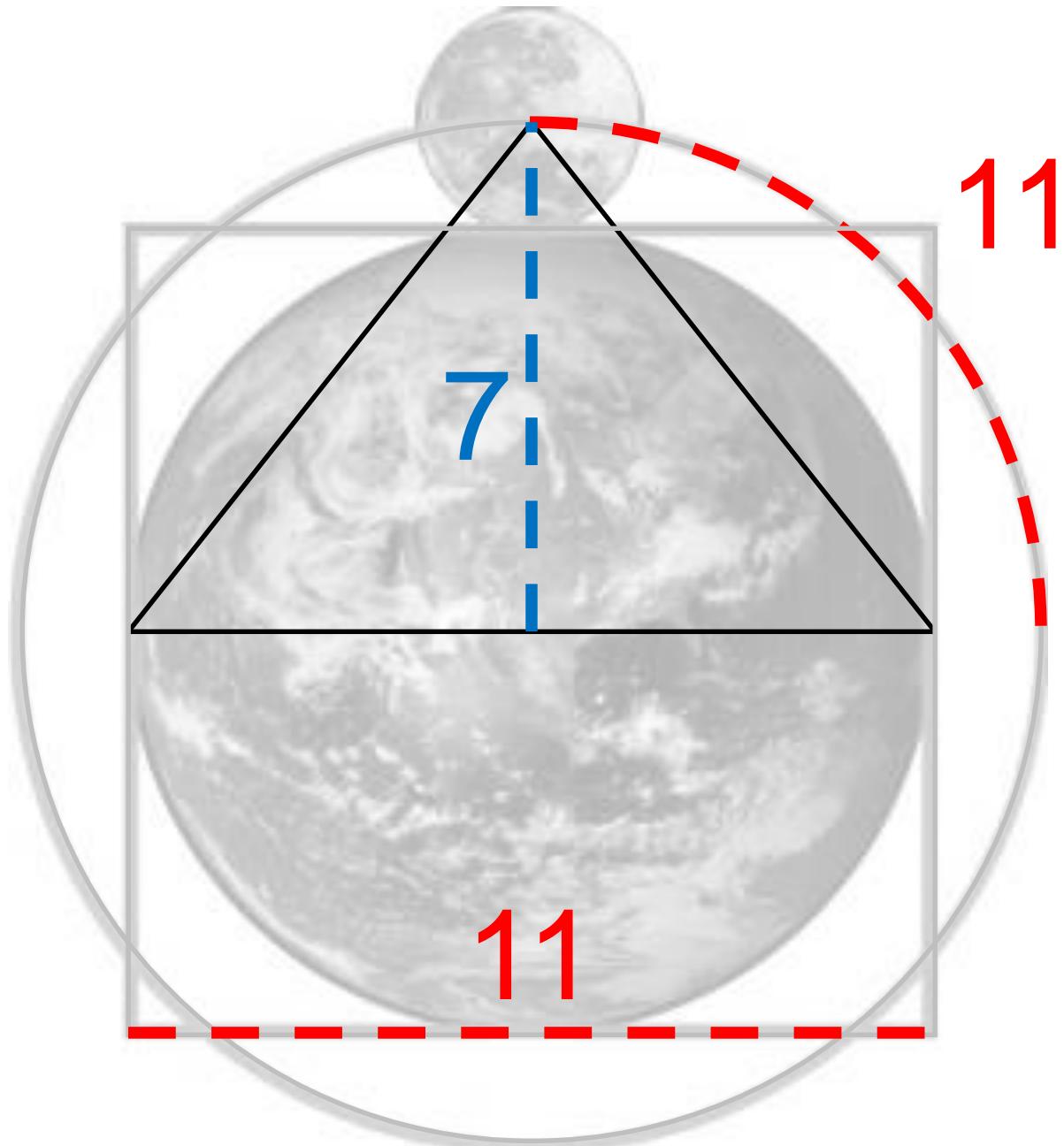


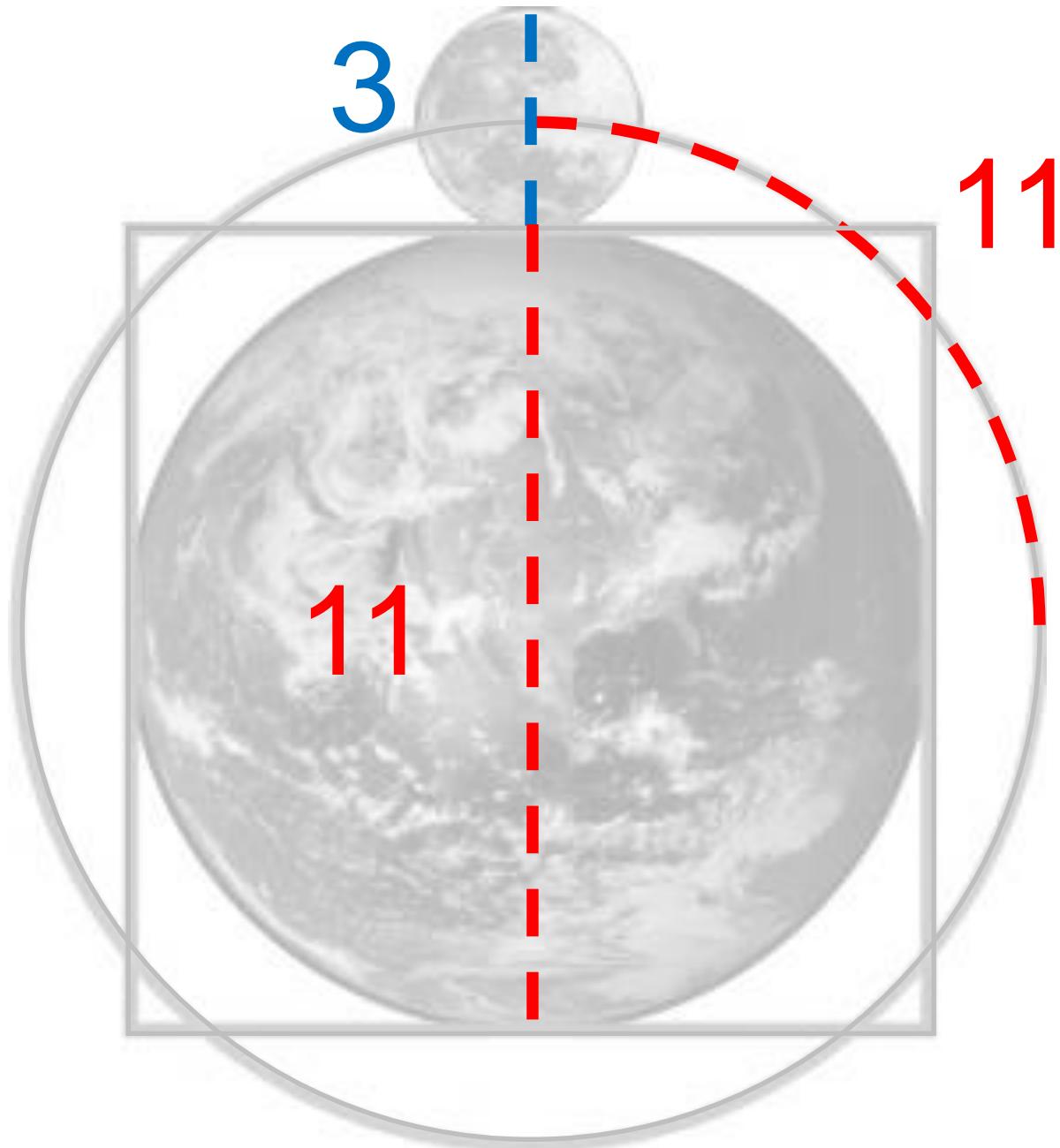
Great Pyramid - Squaring the Circle

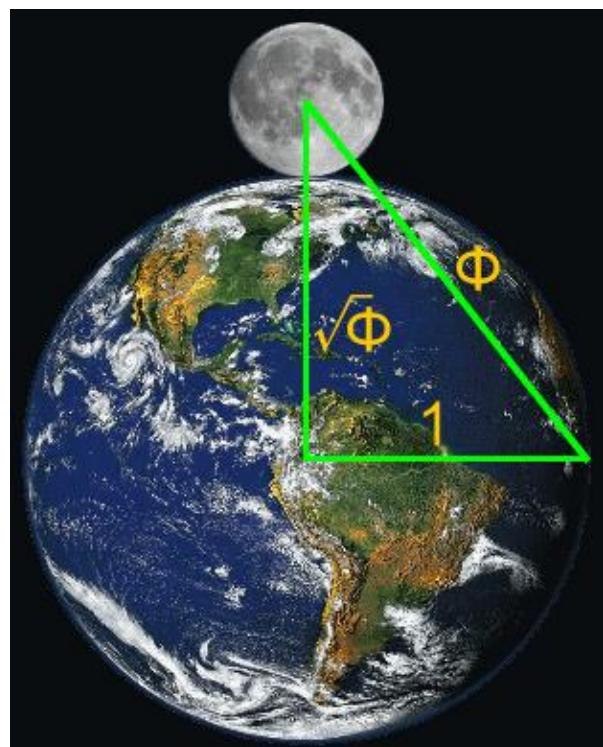
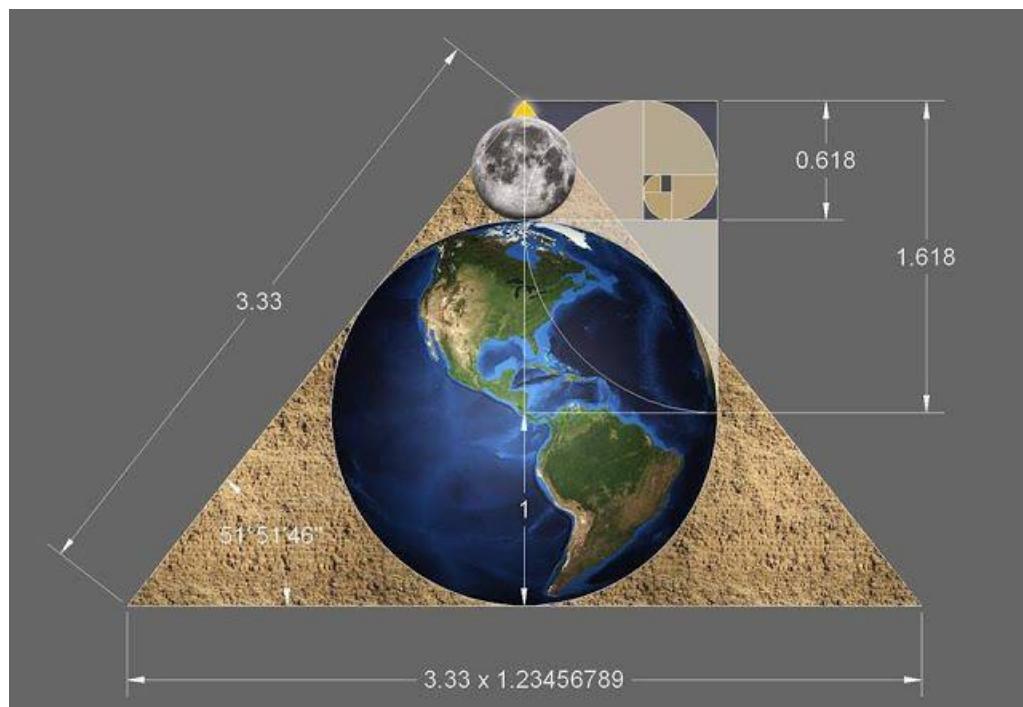
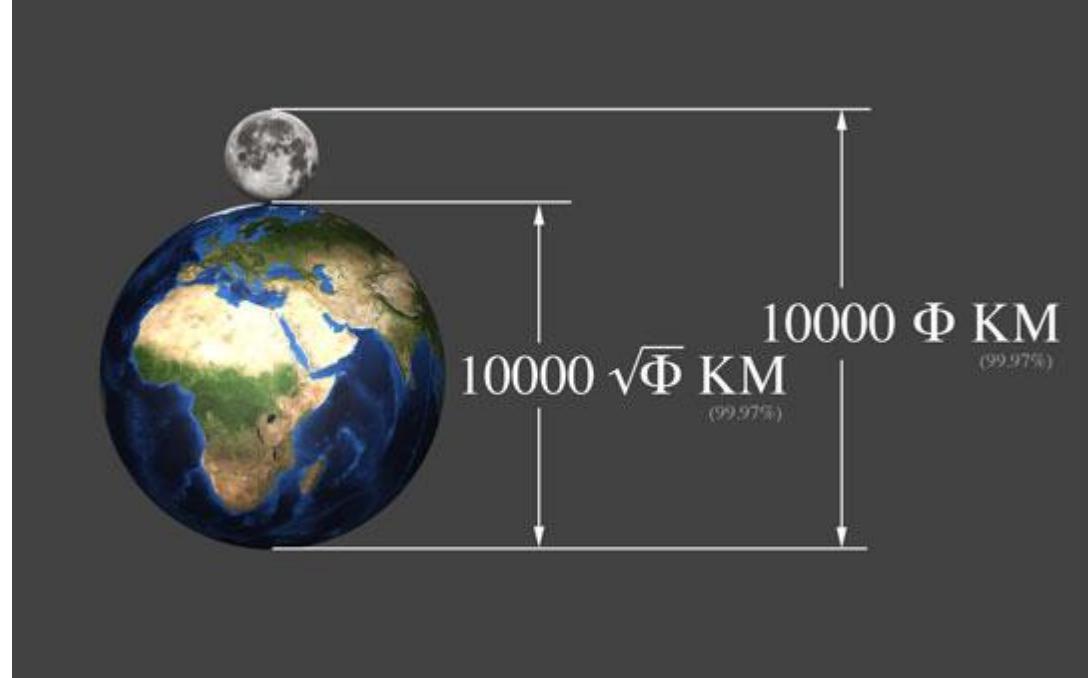
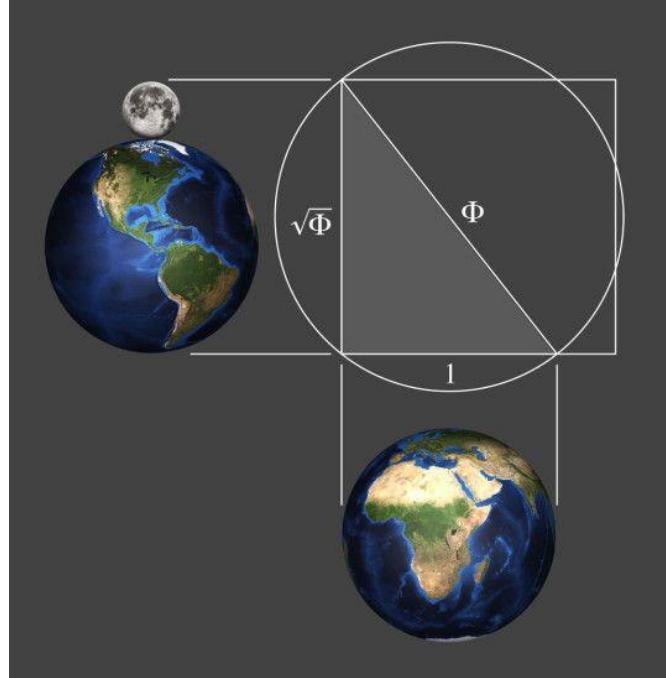


Great Pyramid is $40 \times 7:11$ in Royal Cubits

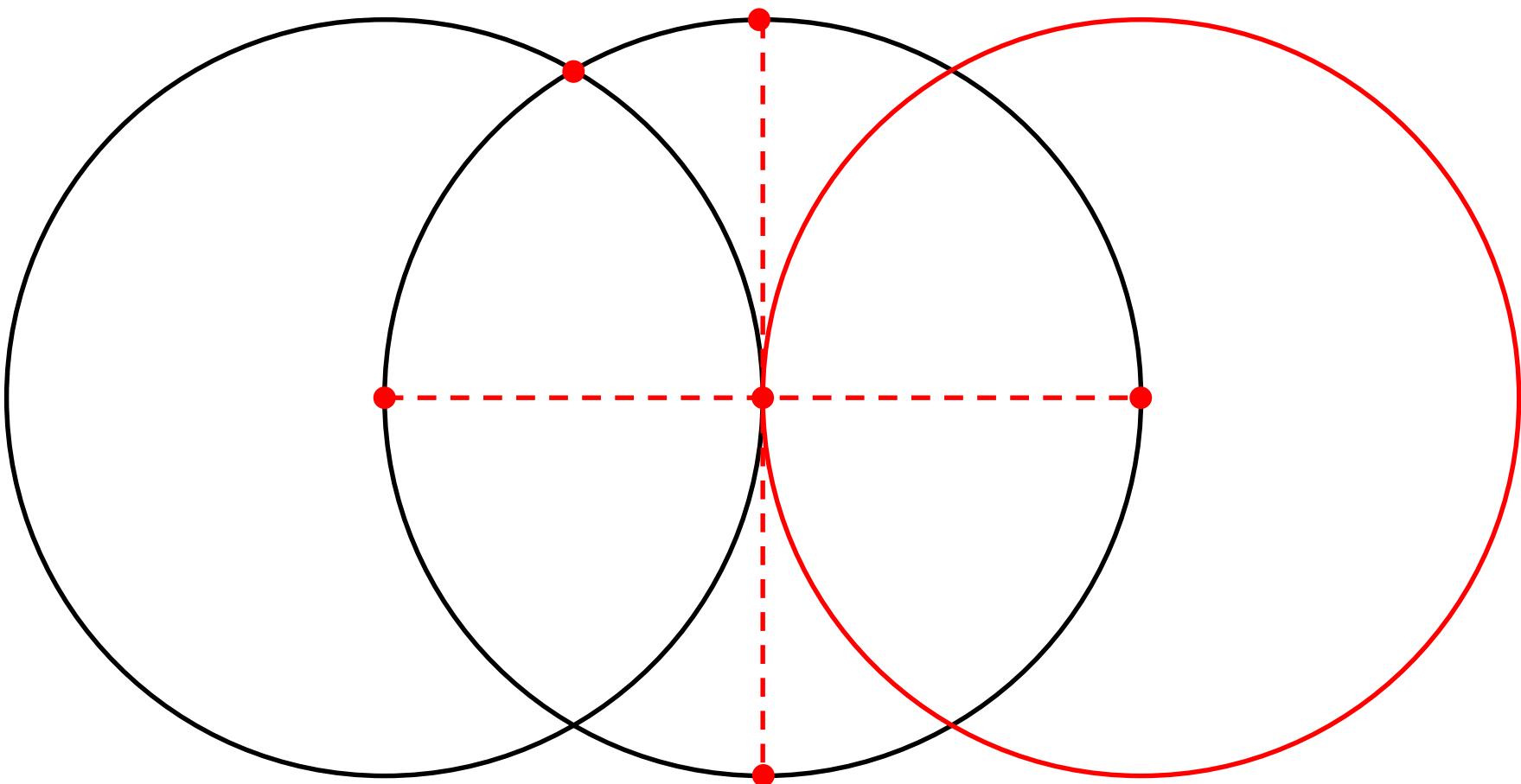


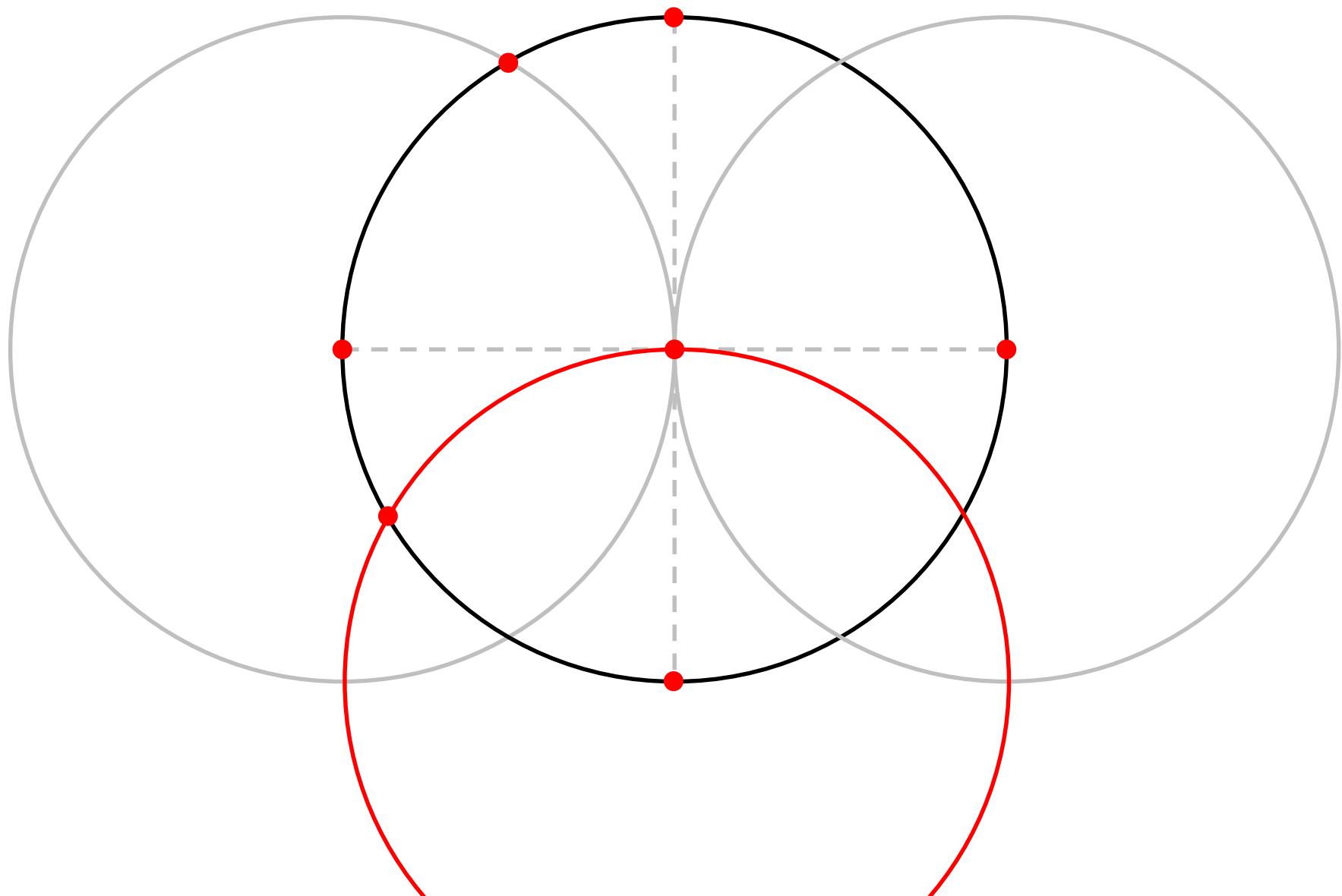


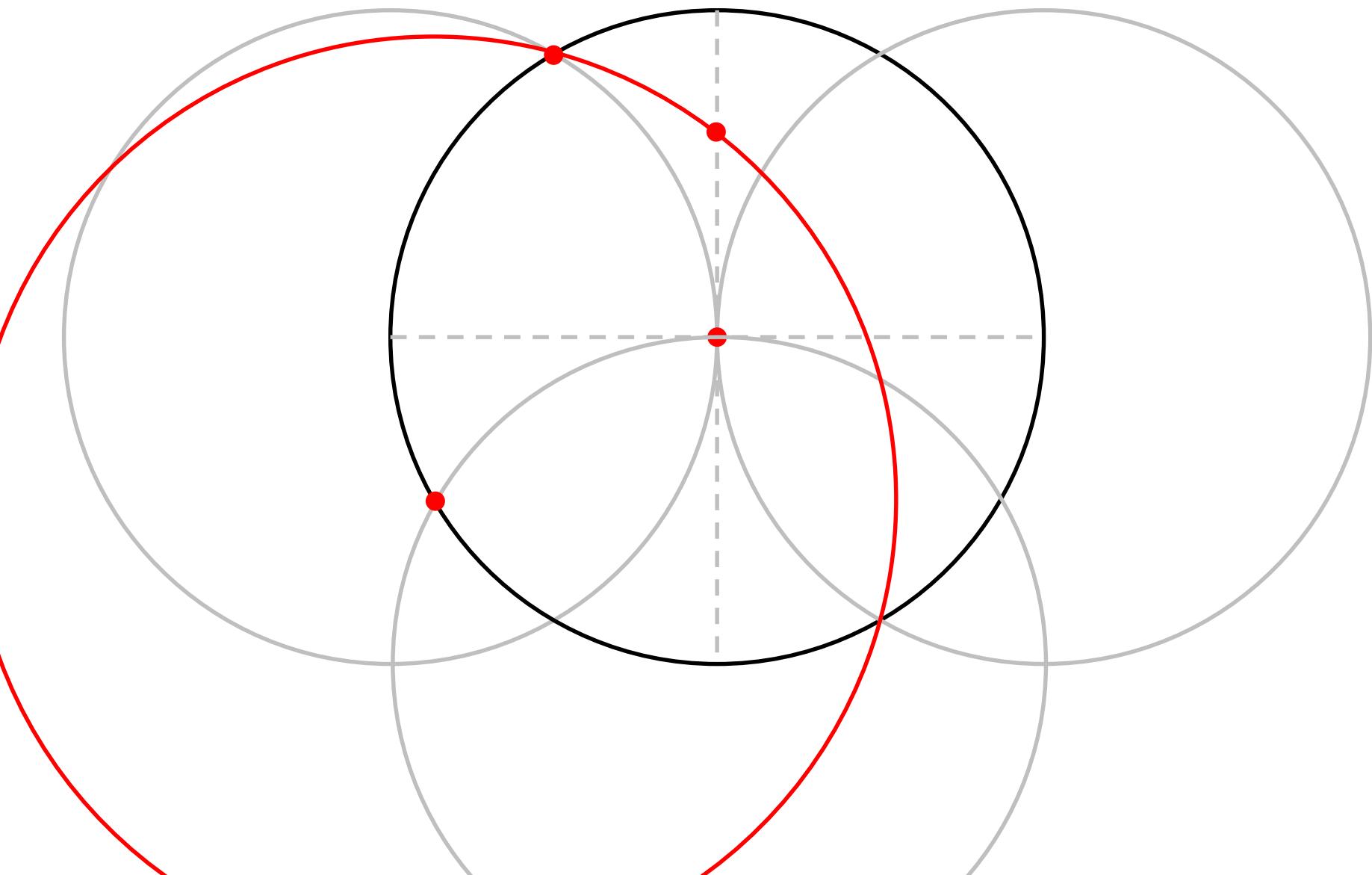


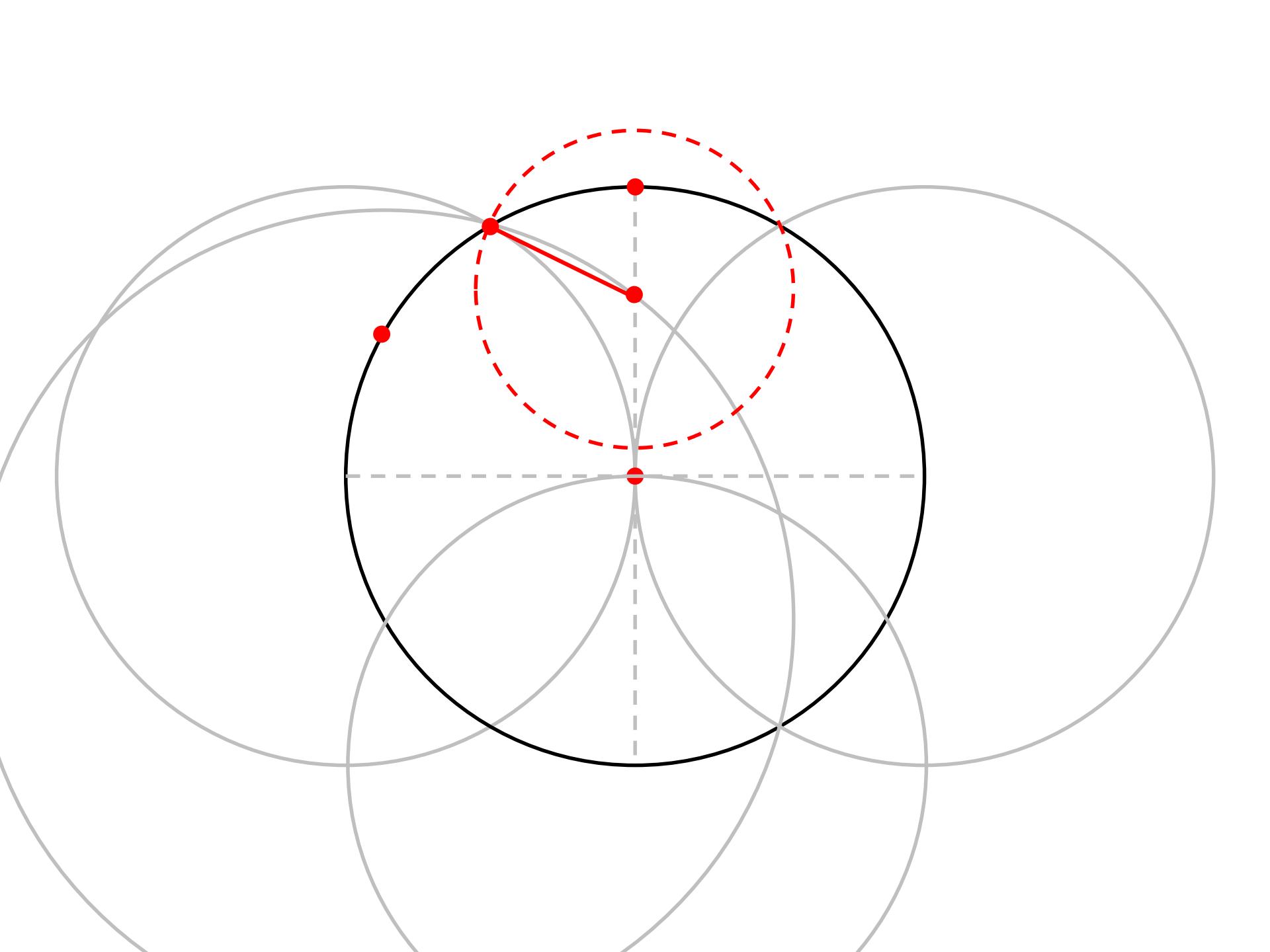


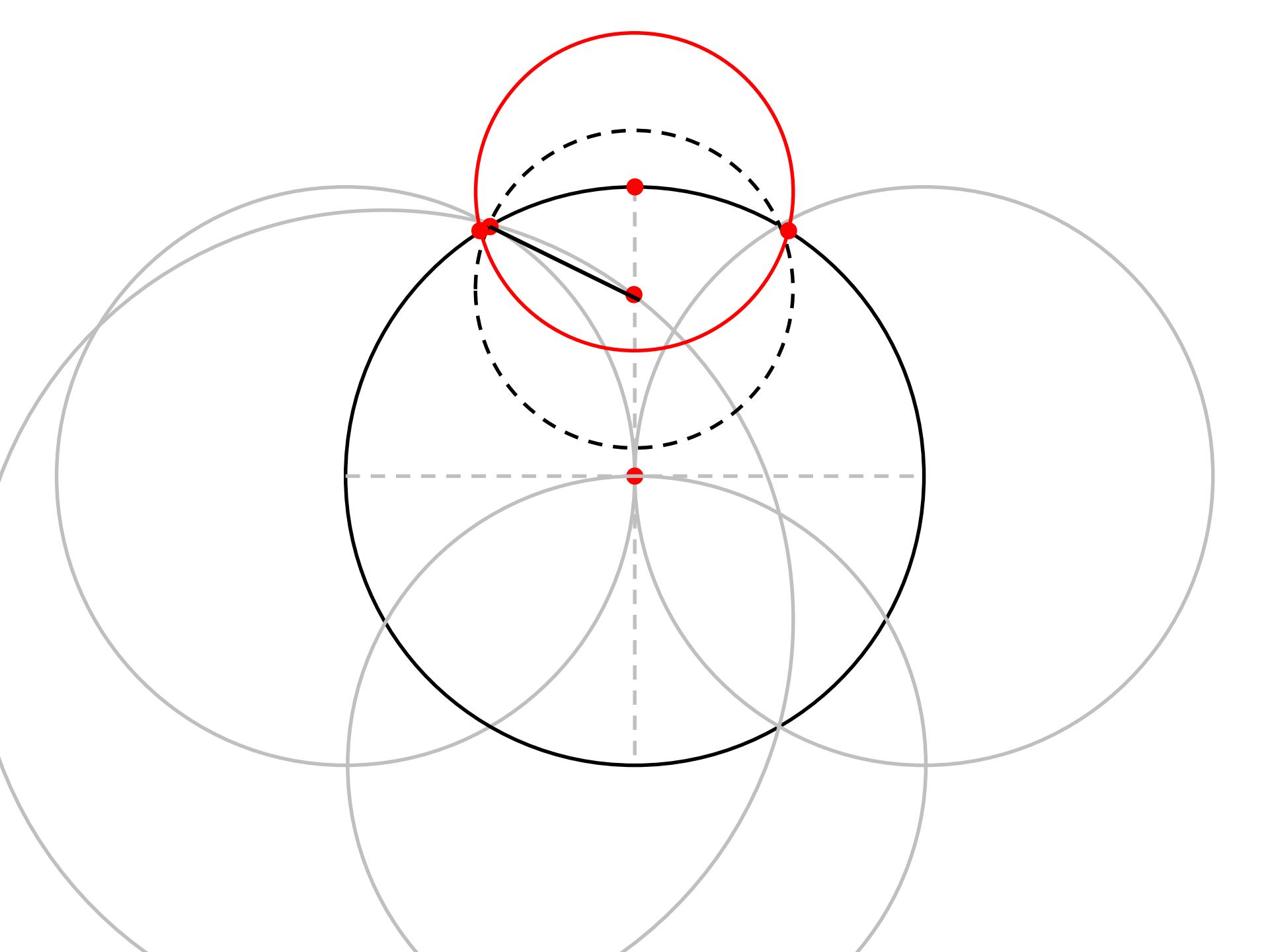
How to Construct the Hendecagon

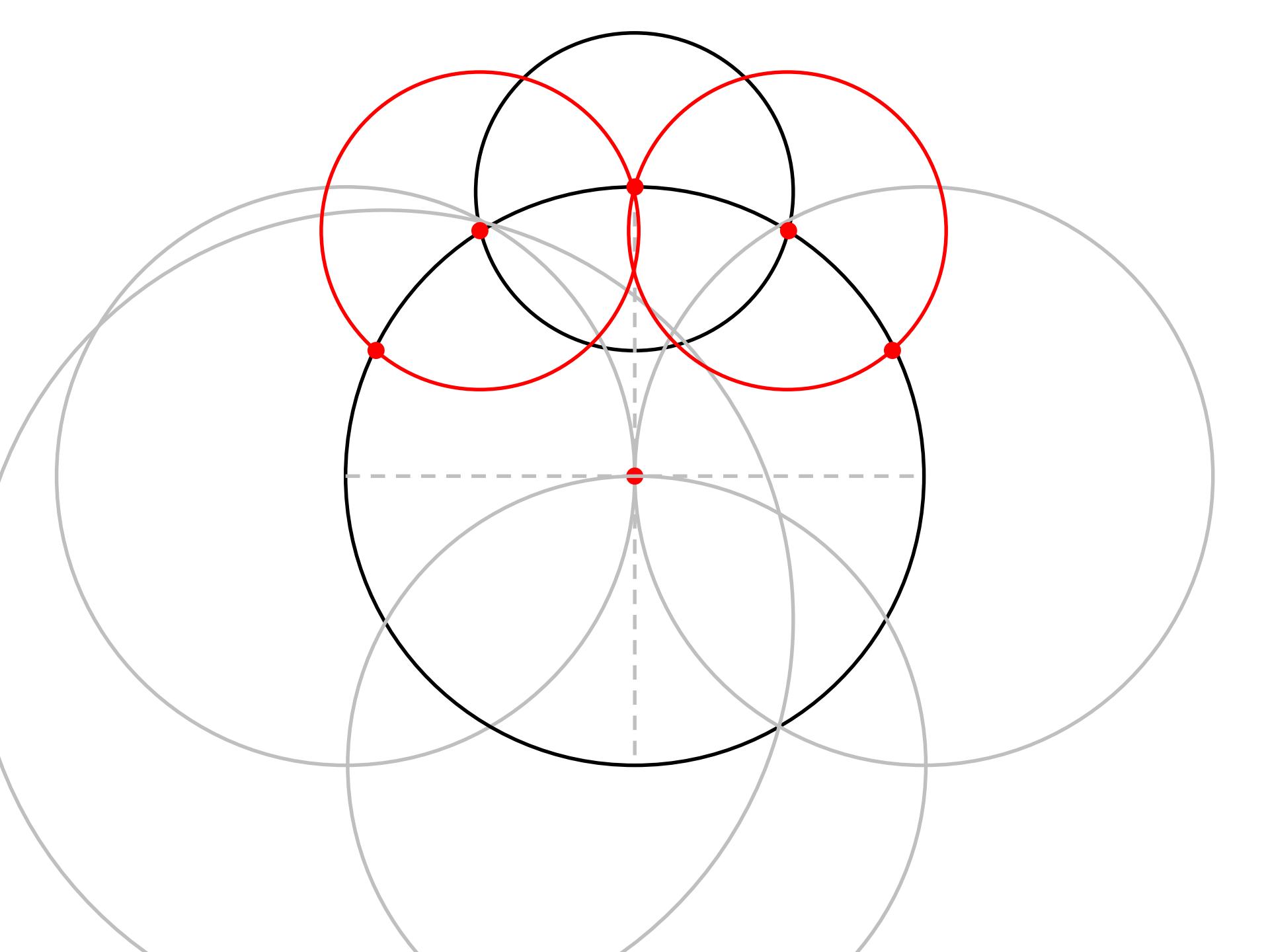


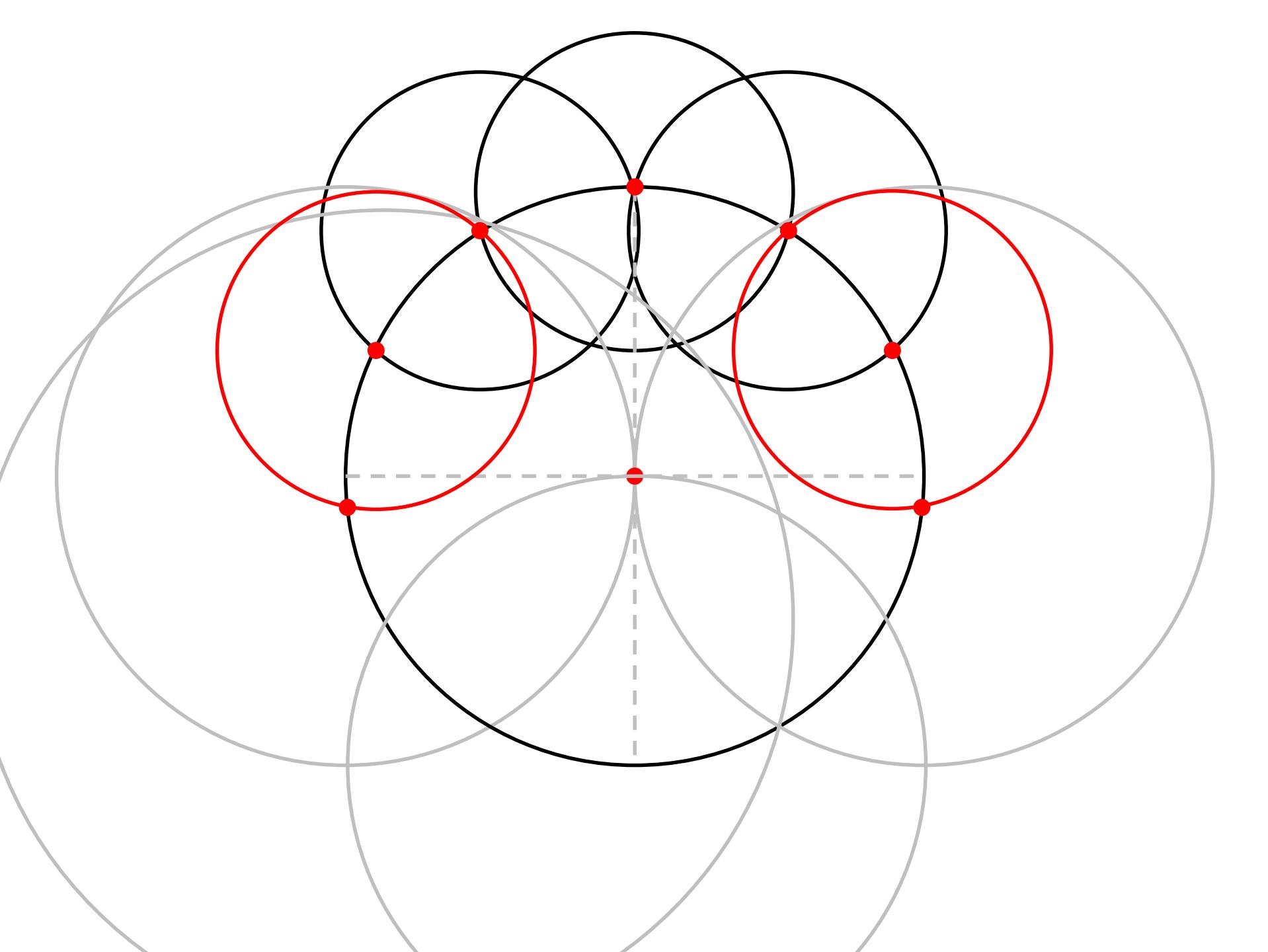


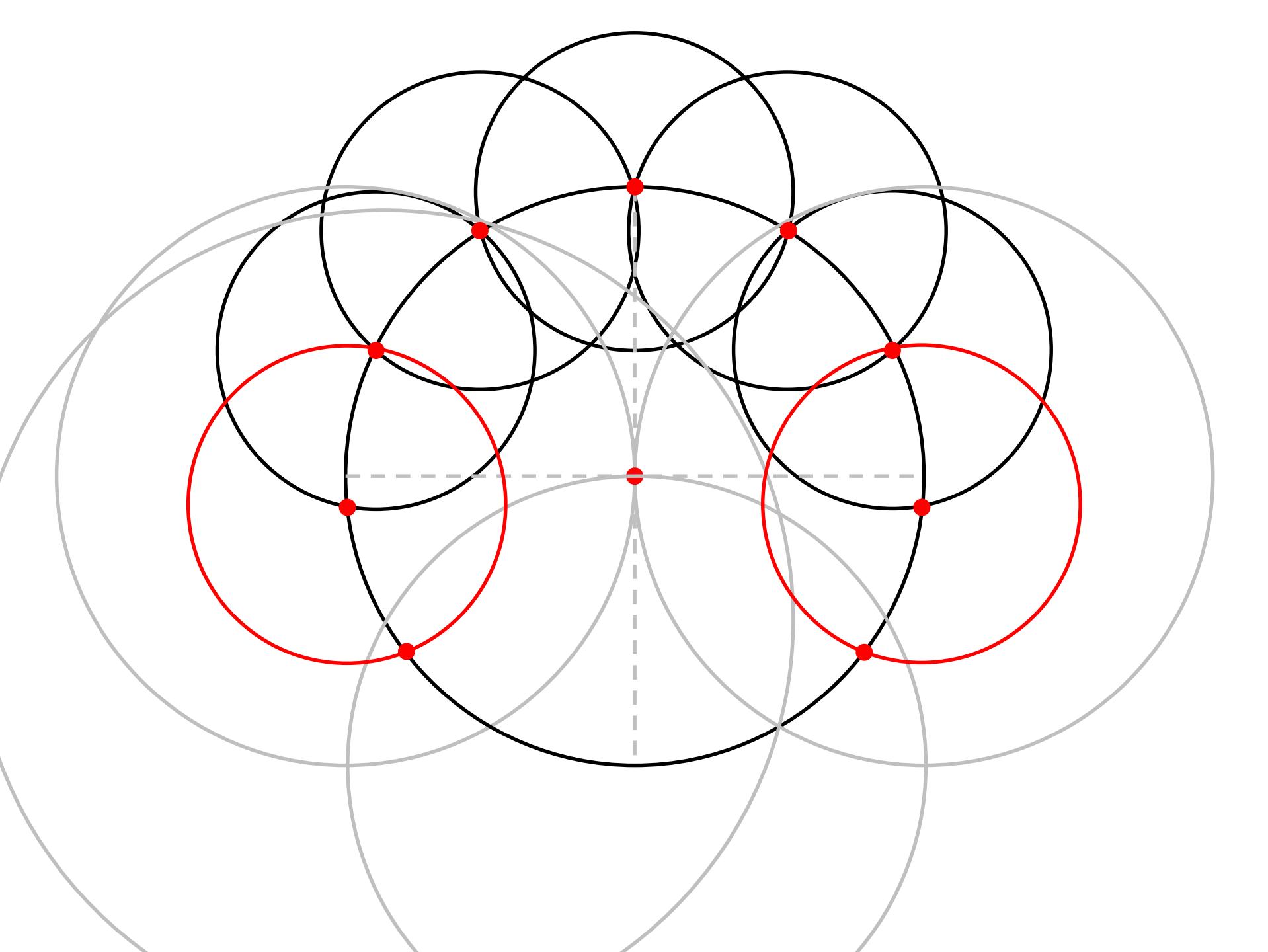


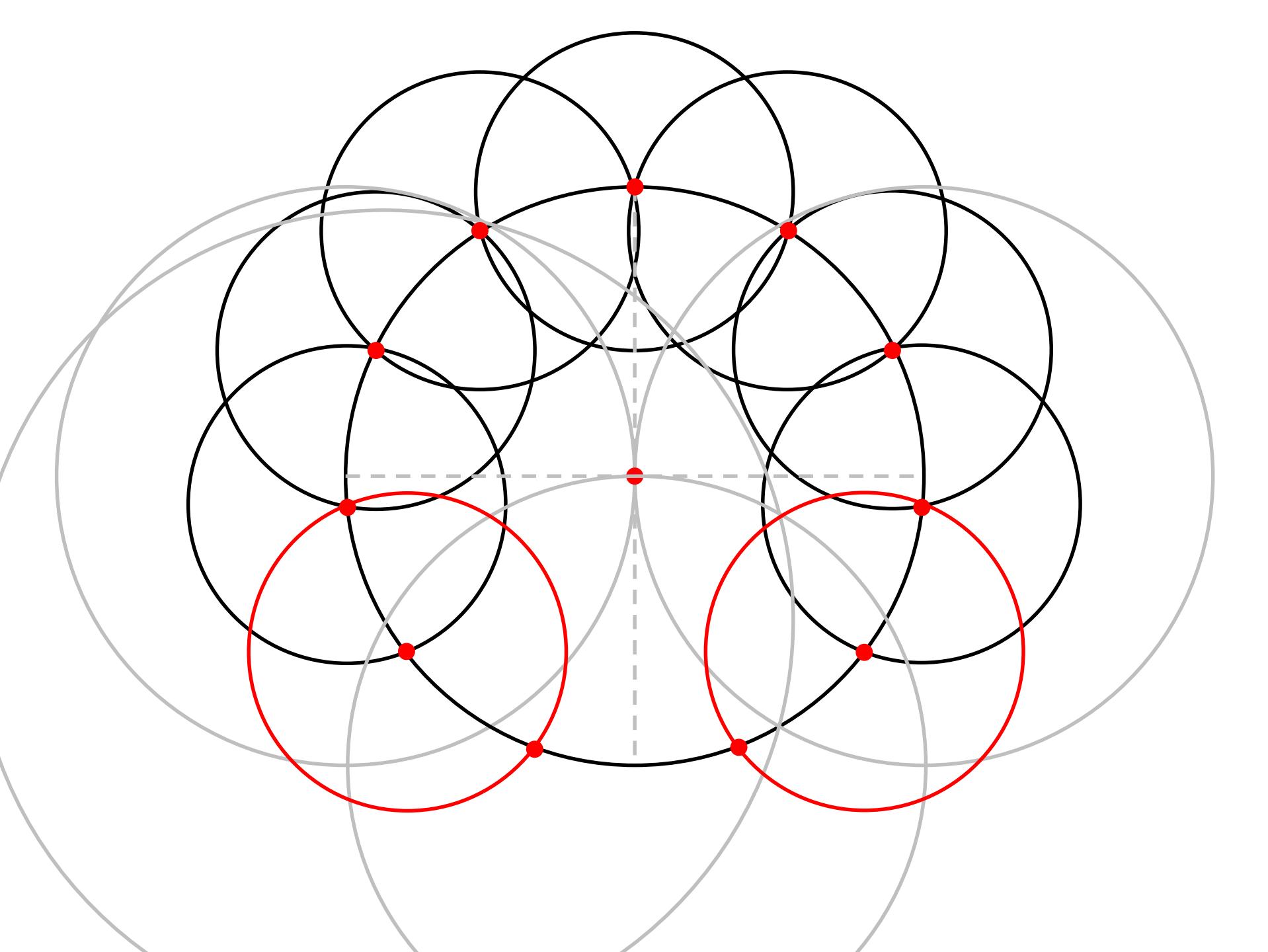


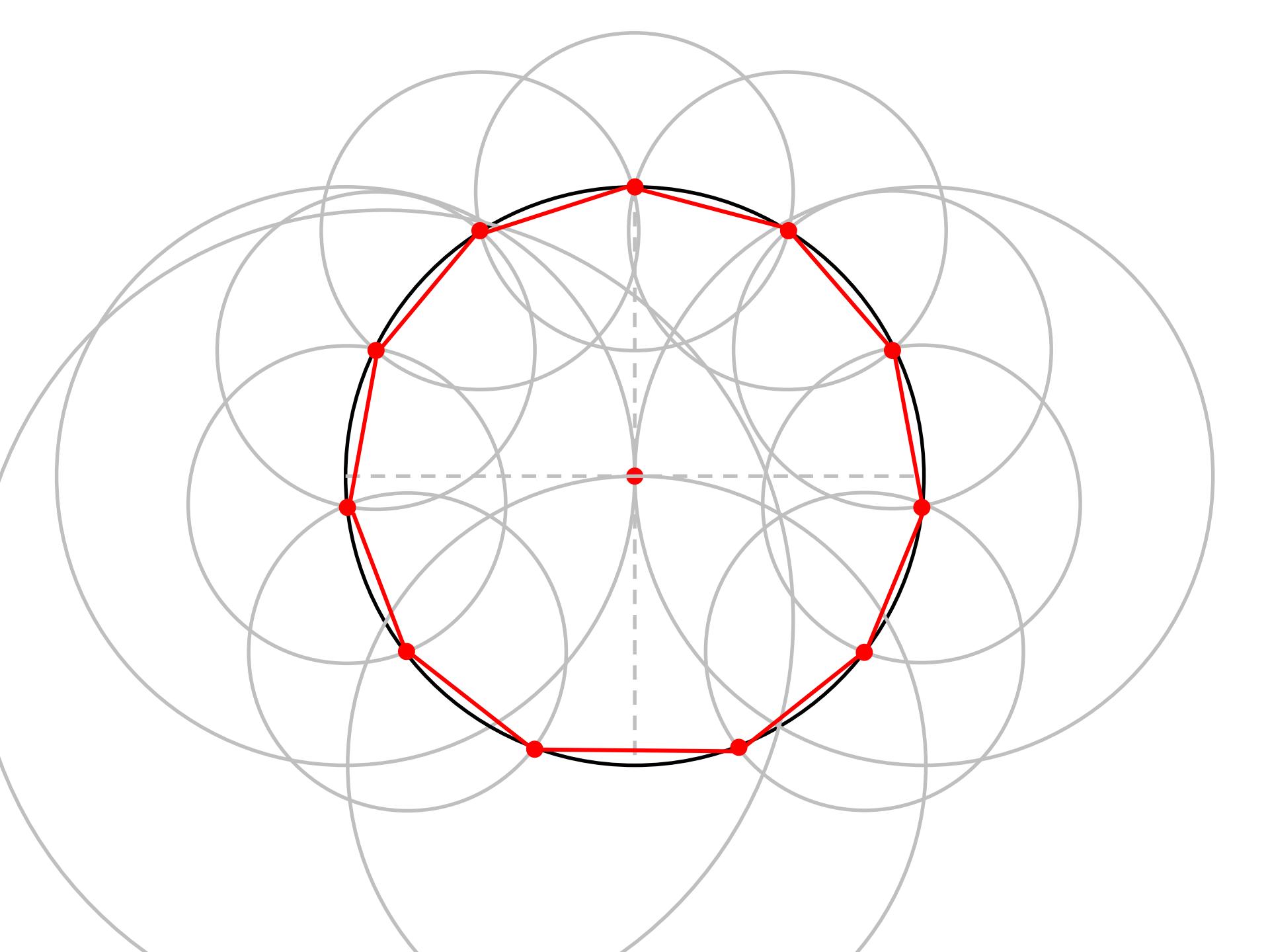






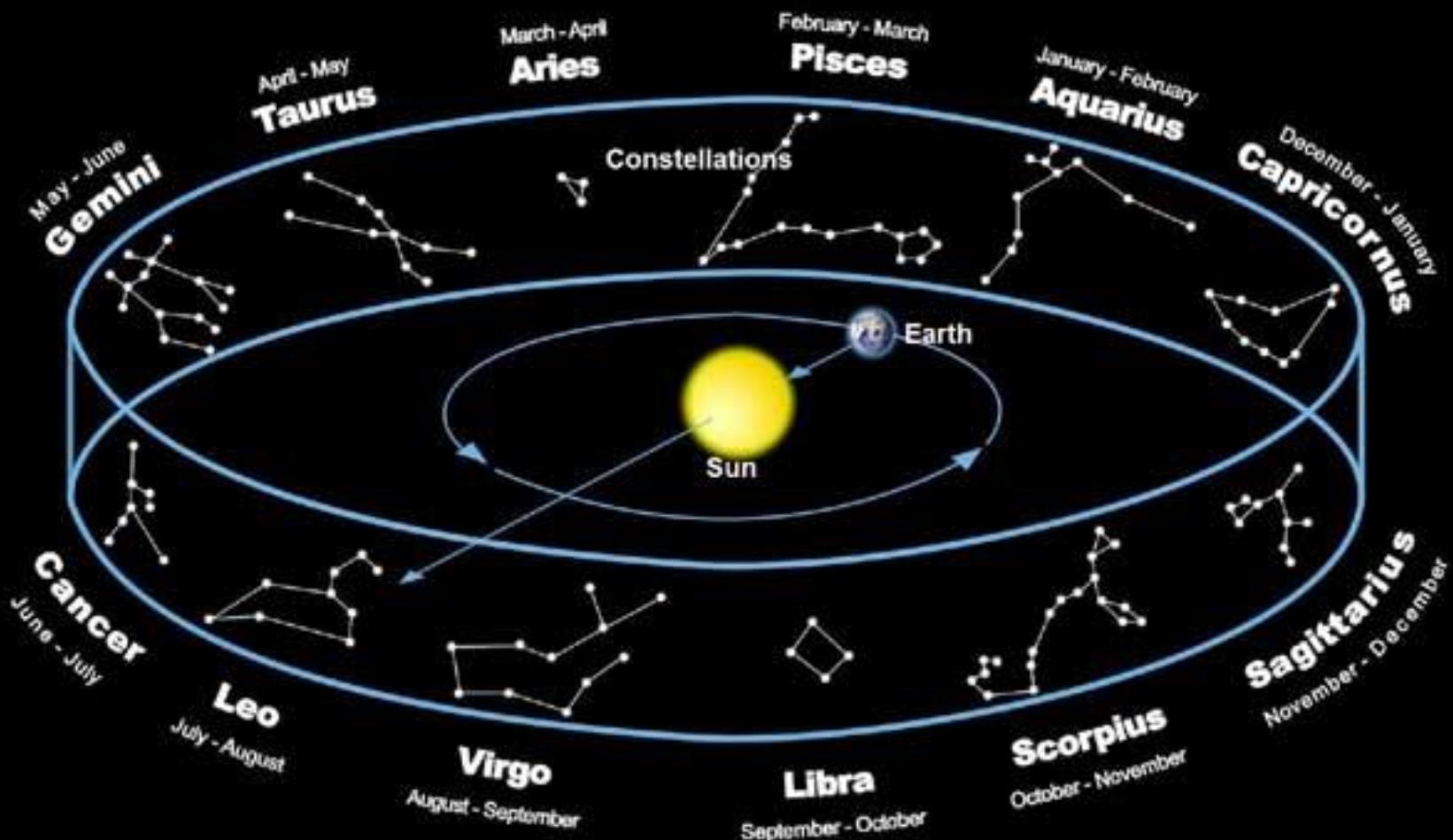






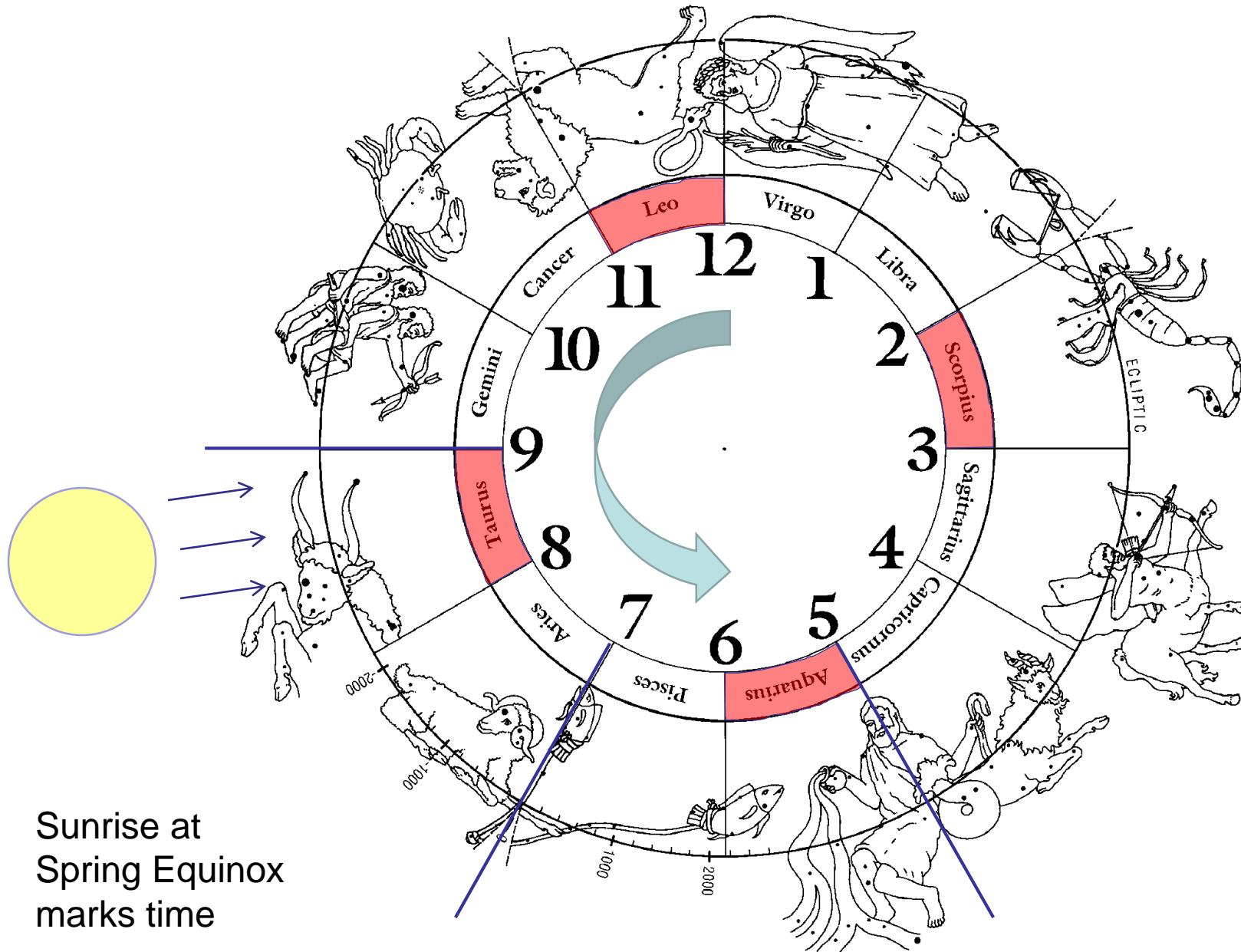
DODEKAD

“12”

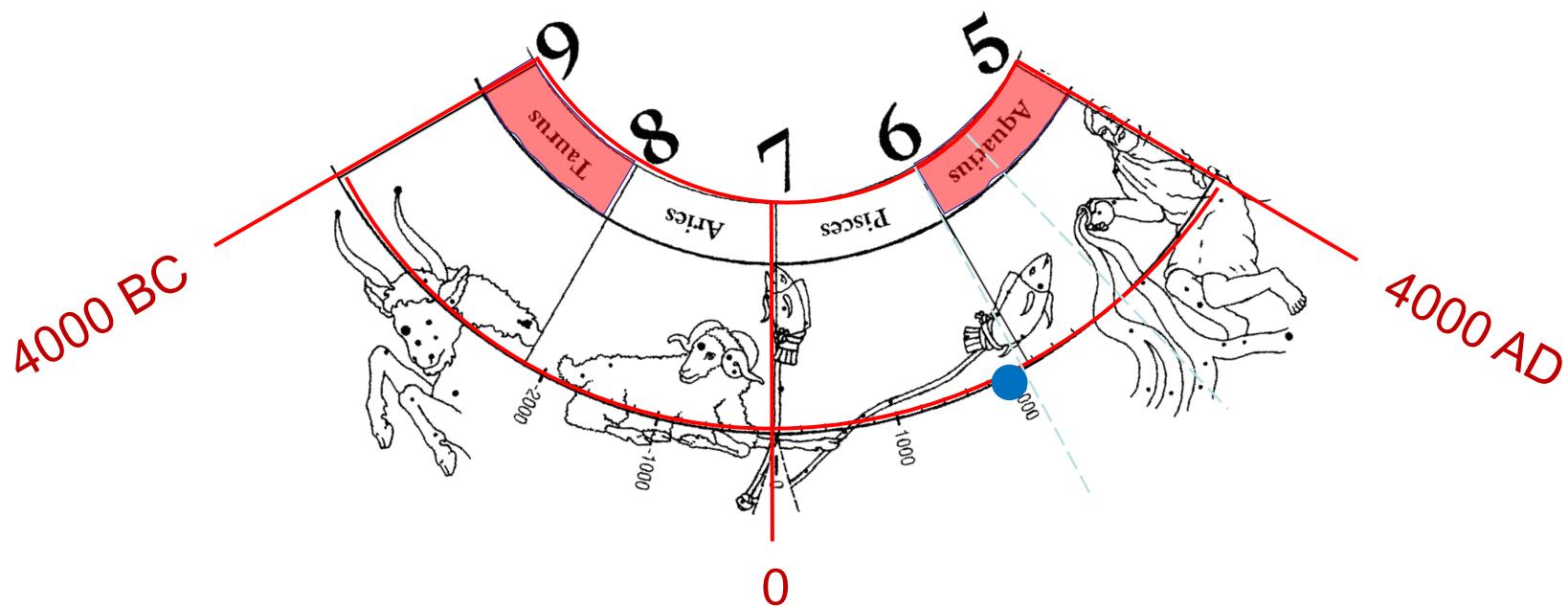


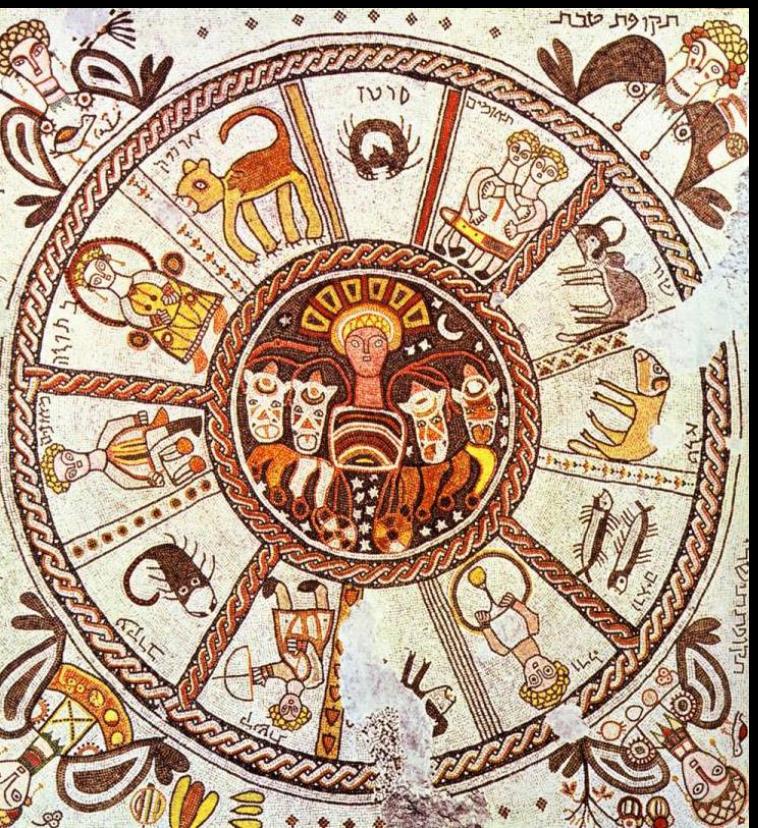
Zodiac Revolutions – 4 Royal Constellations

Northern Hemisphere Counterclockwise



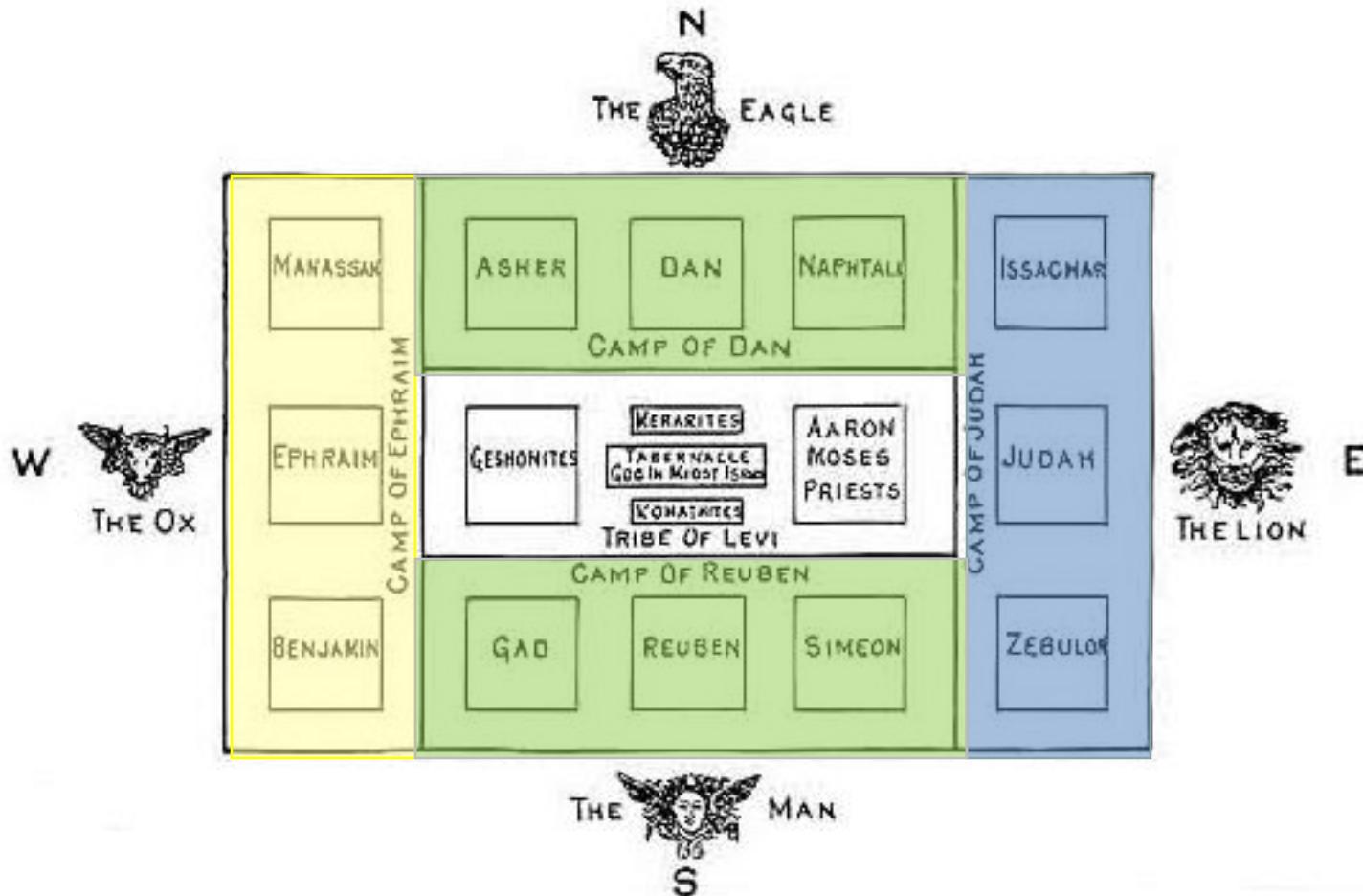
Constellations are Earth's Clock



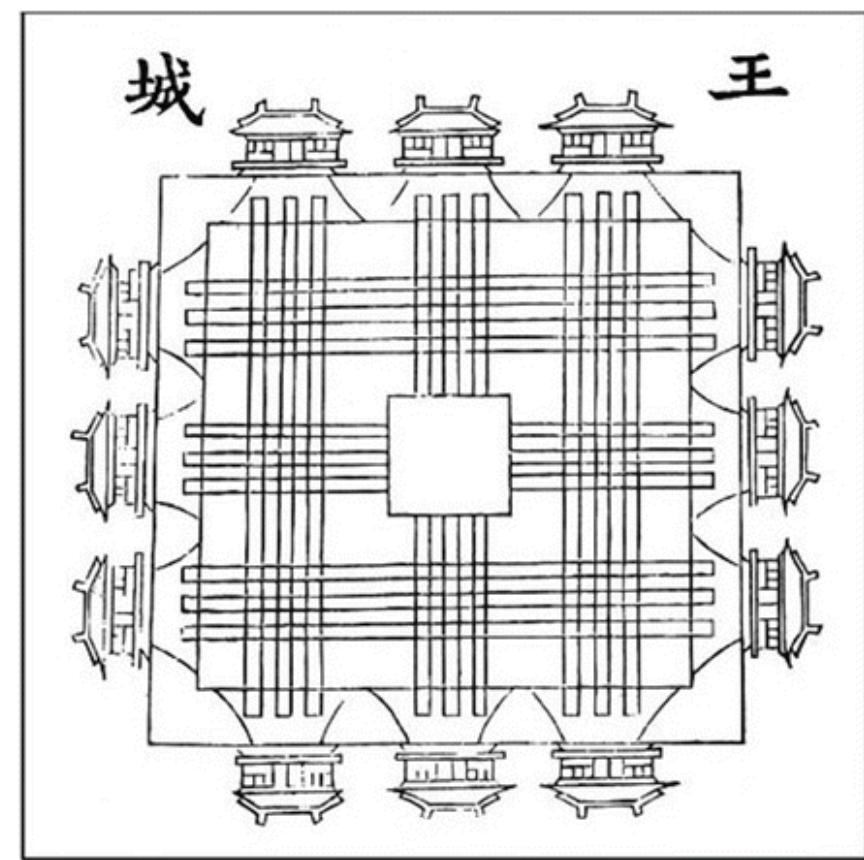
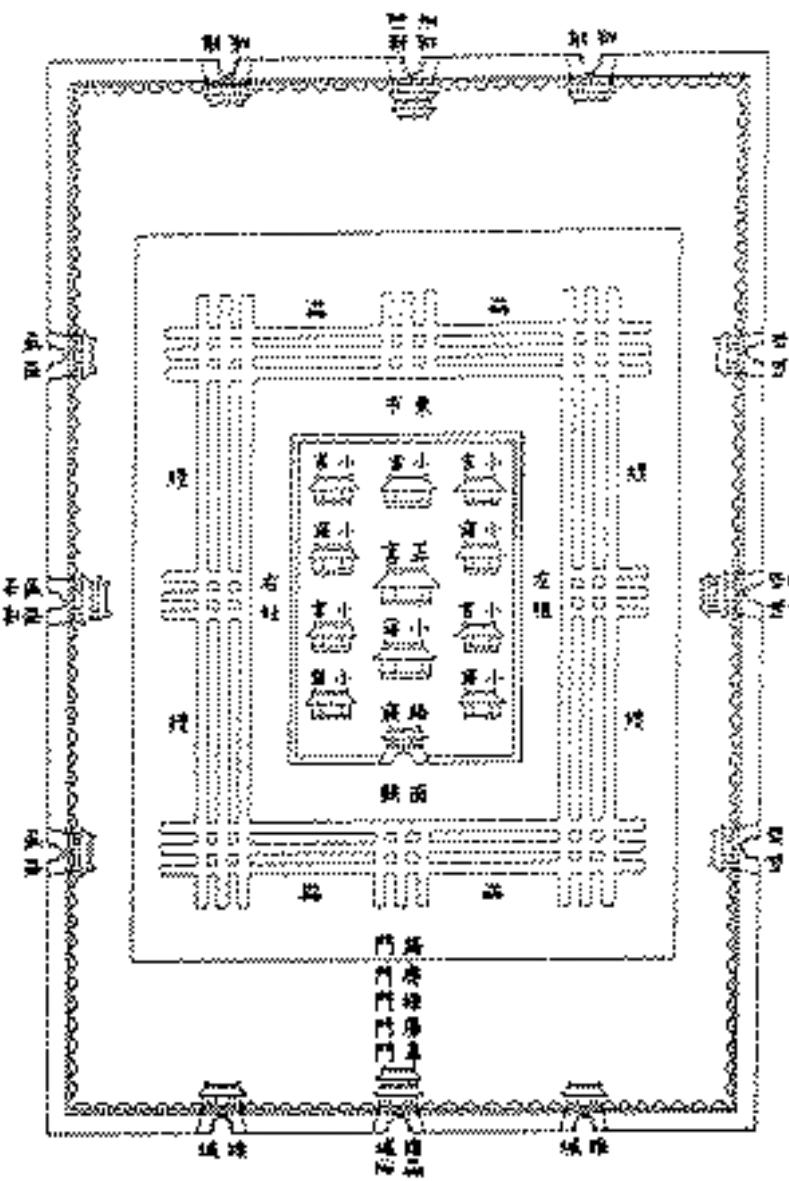


Temple as Image of Cosmos – Cyclical Time

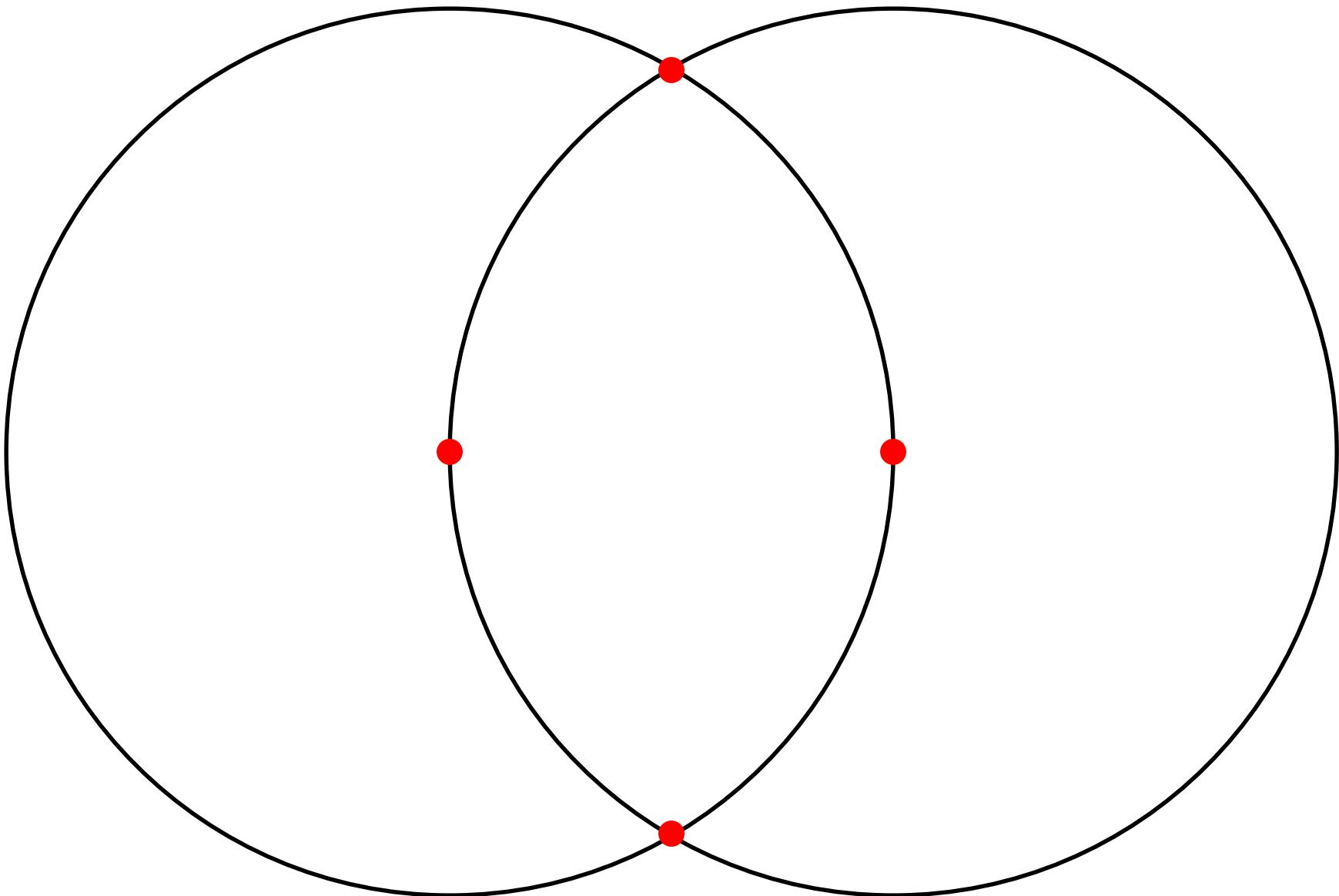
Banners + Directionality in Camp of Israel (Num. 2:2-3, 10, 18, 25)

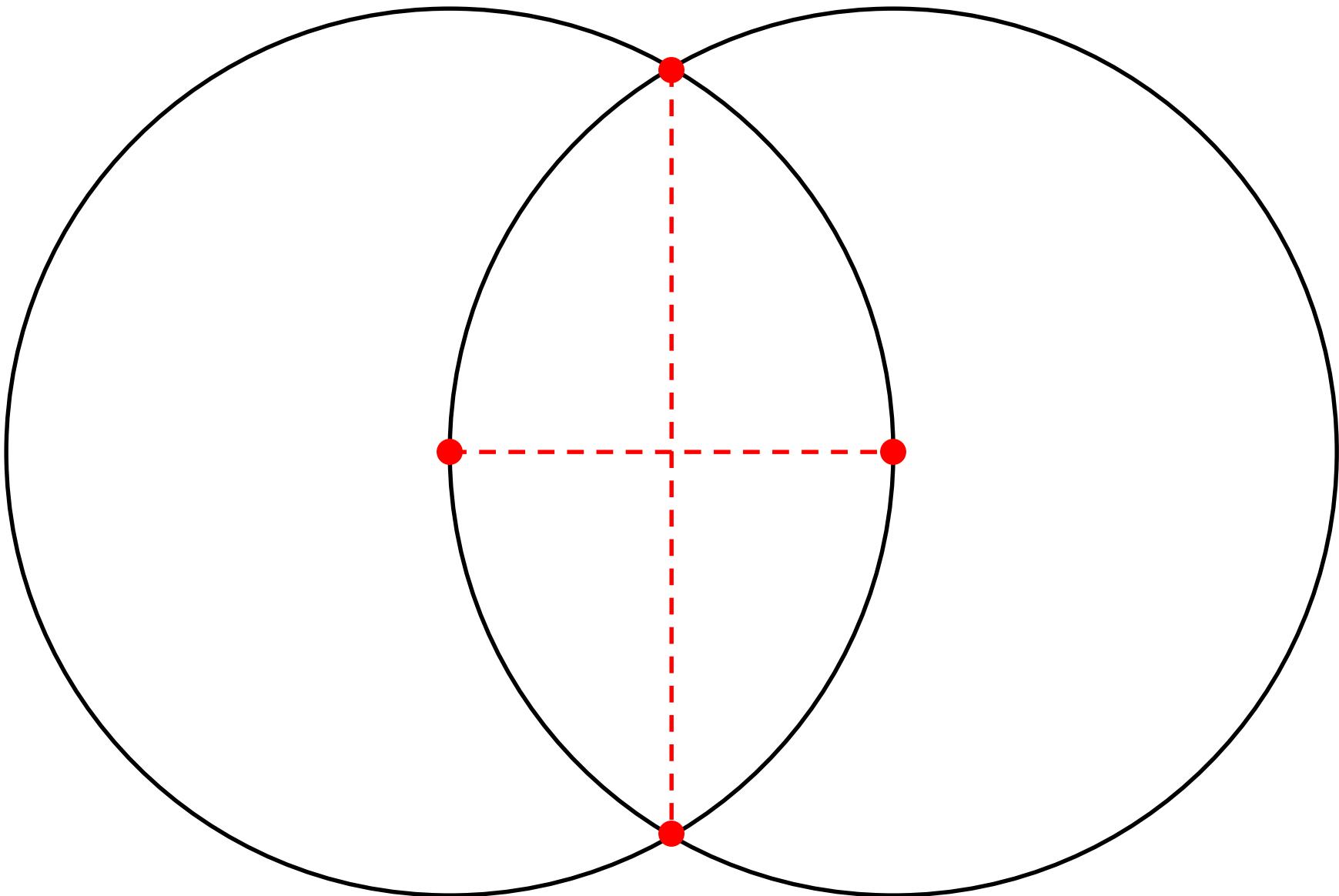


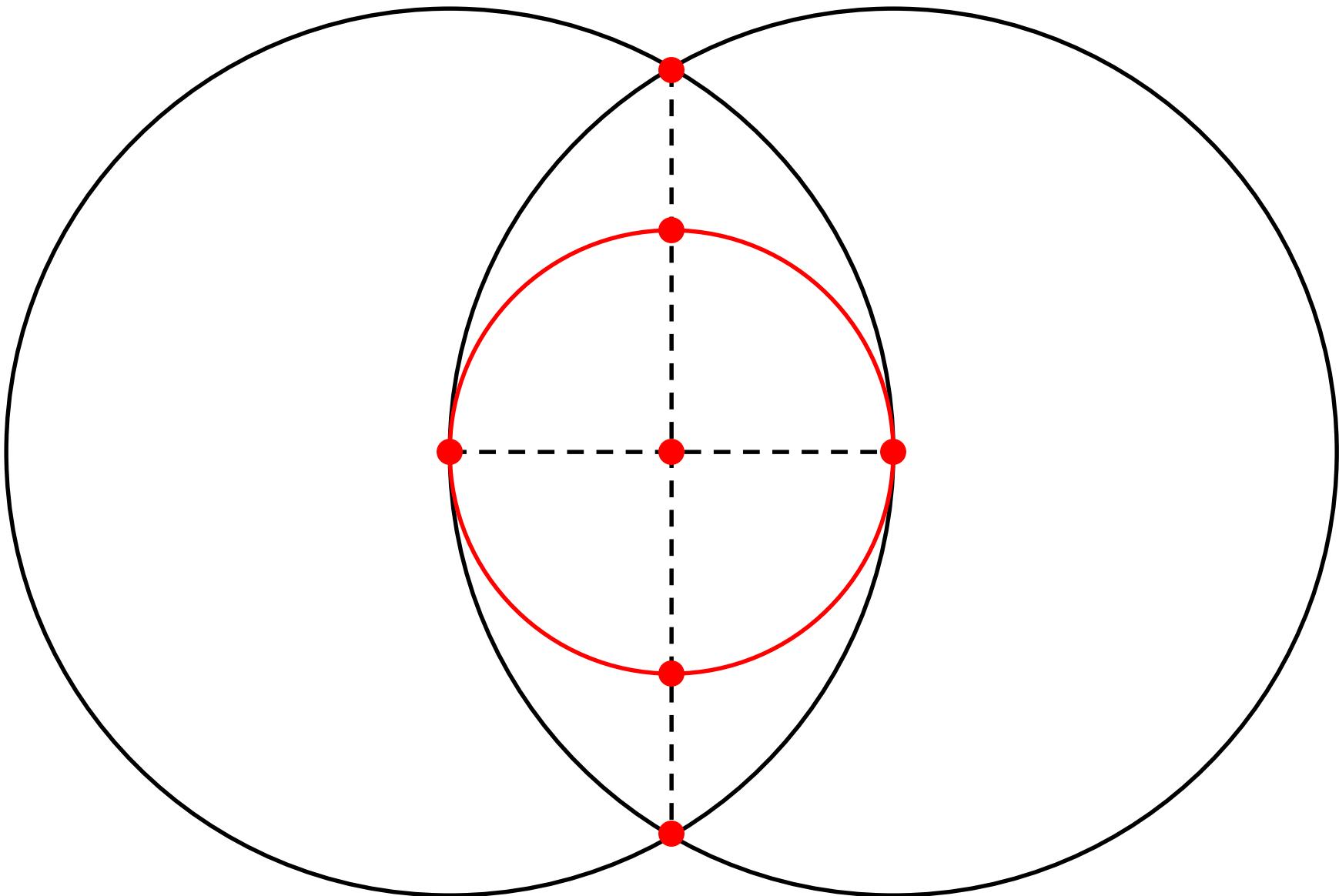


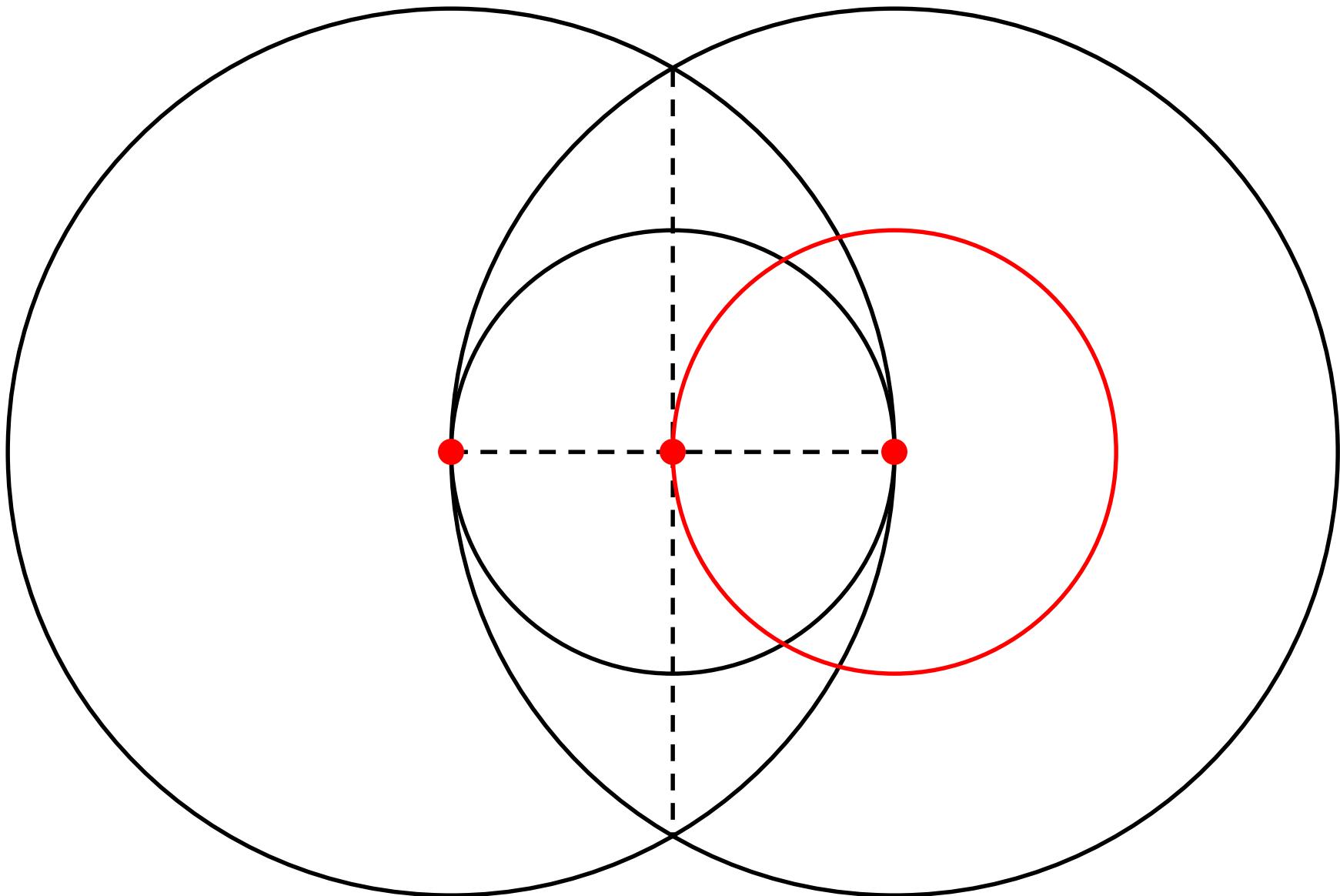


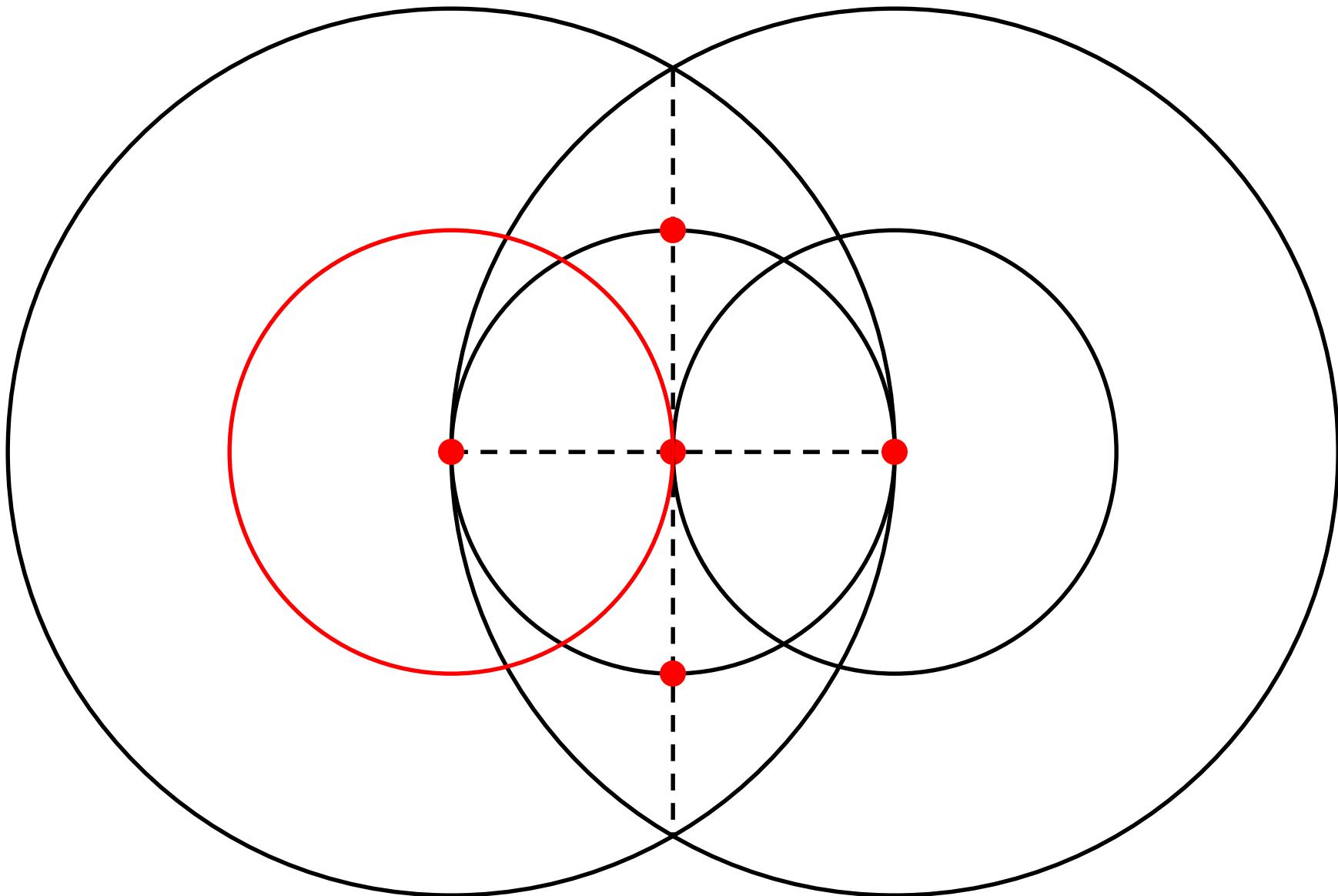
How to Construct the Dodekagon

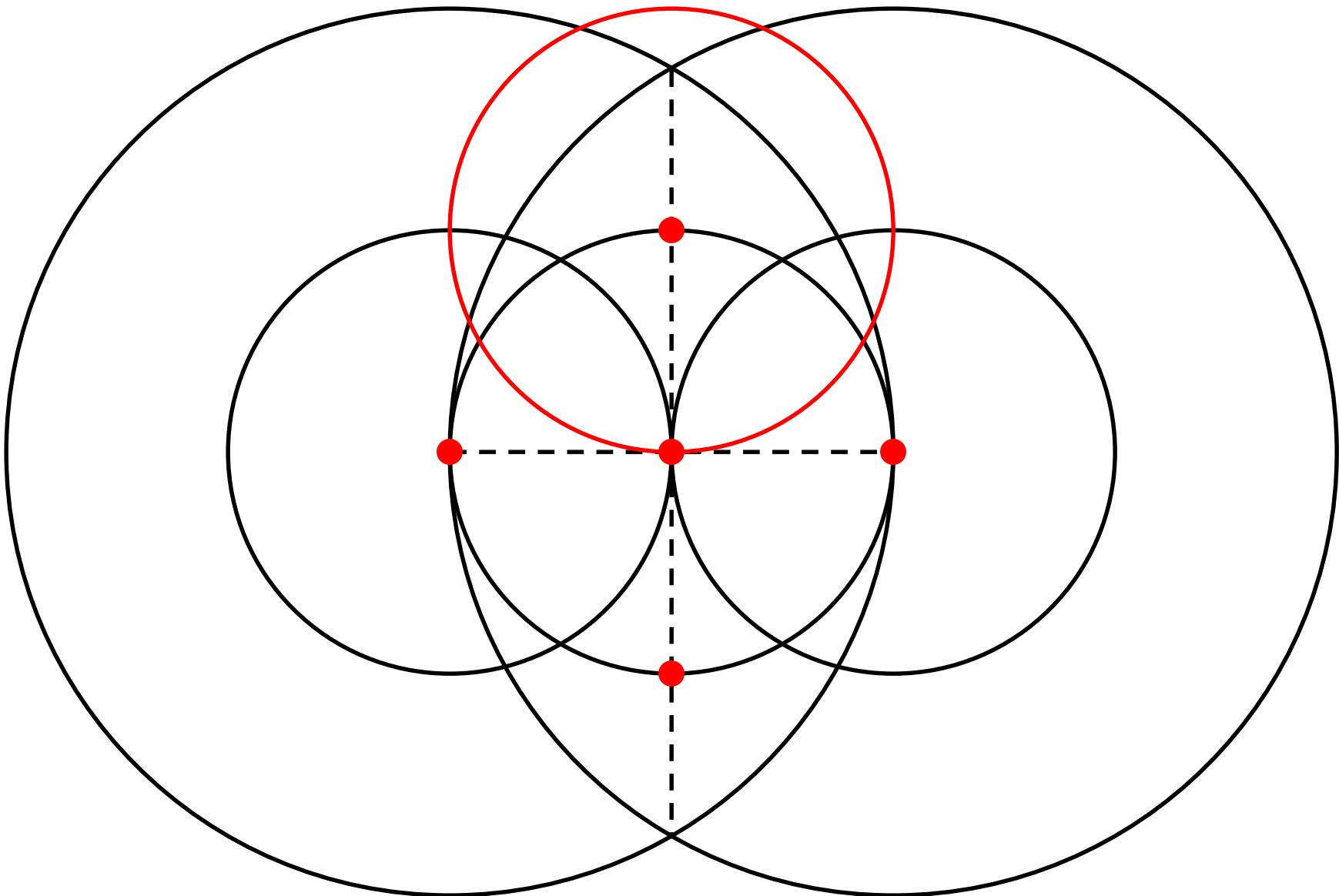


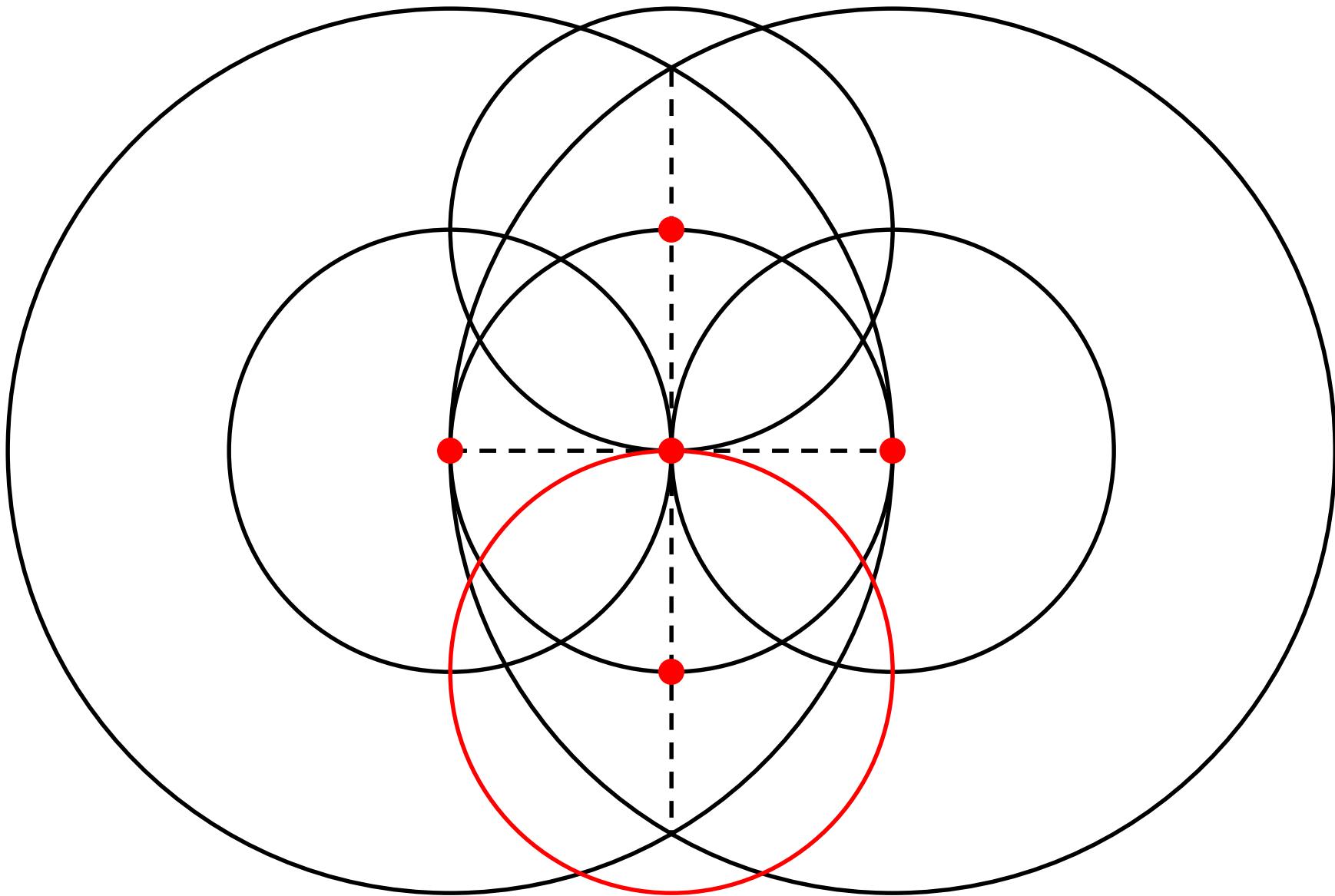


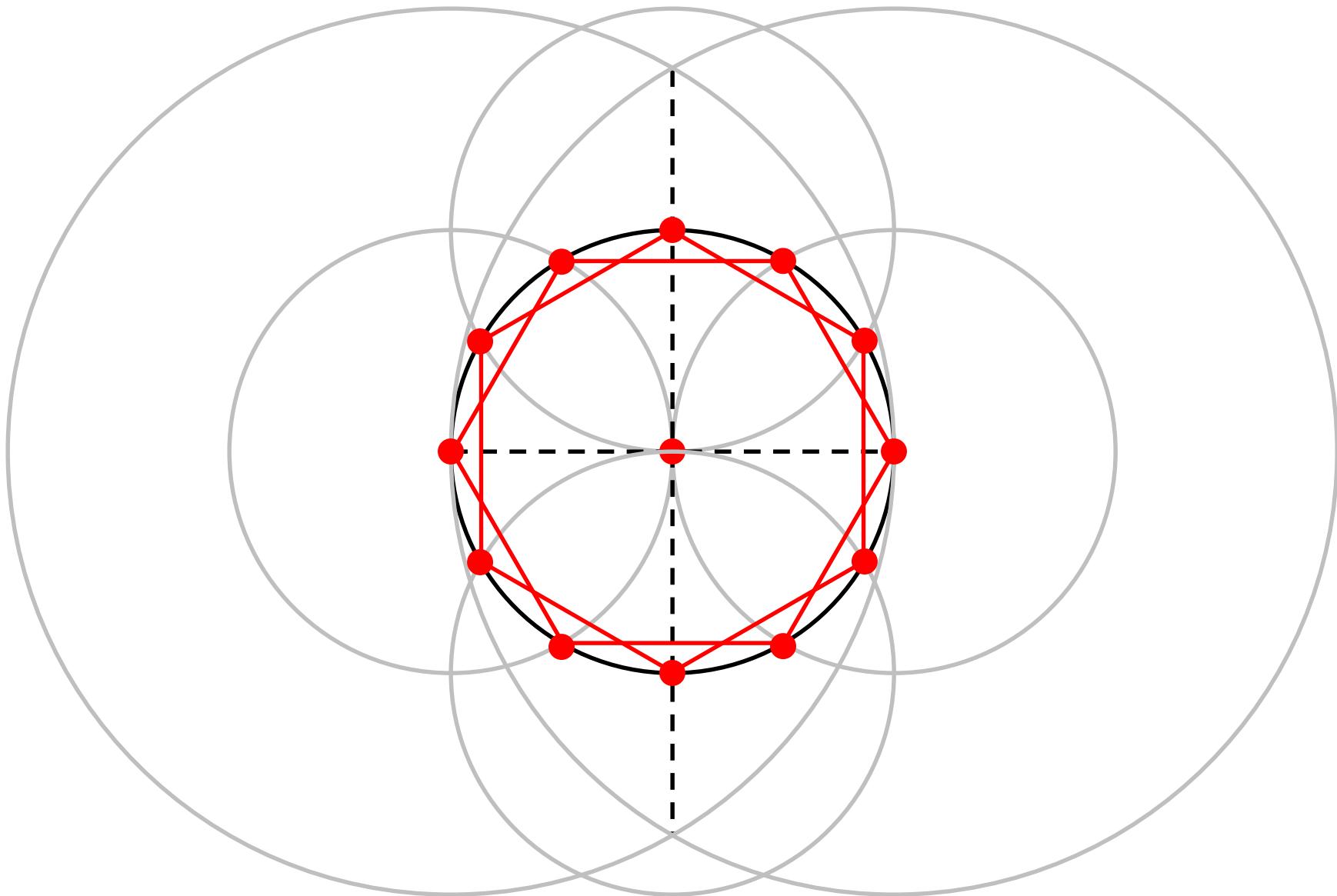


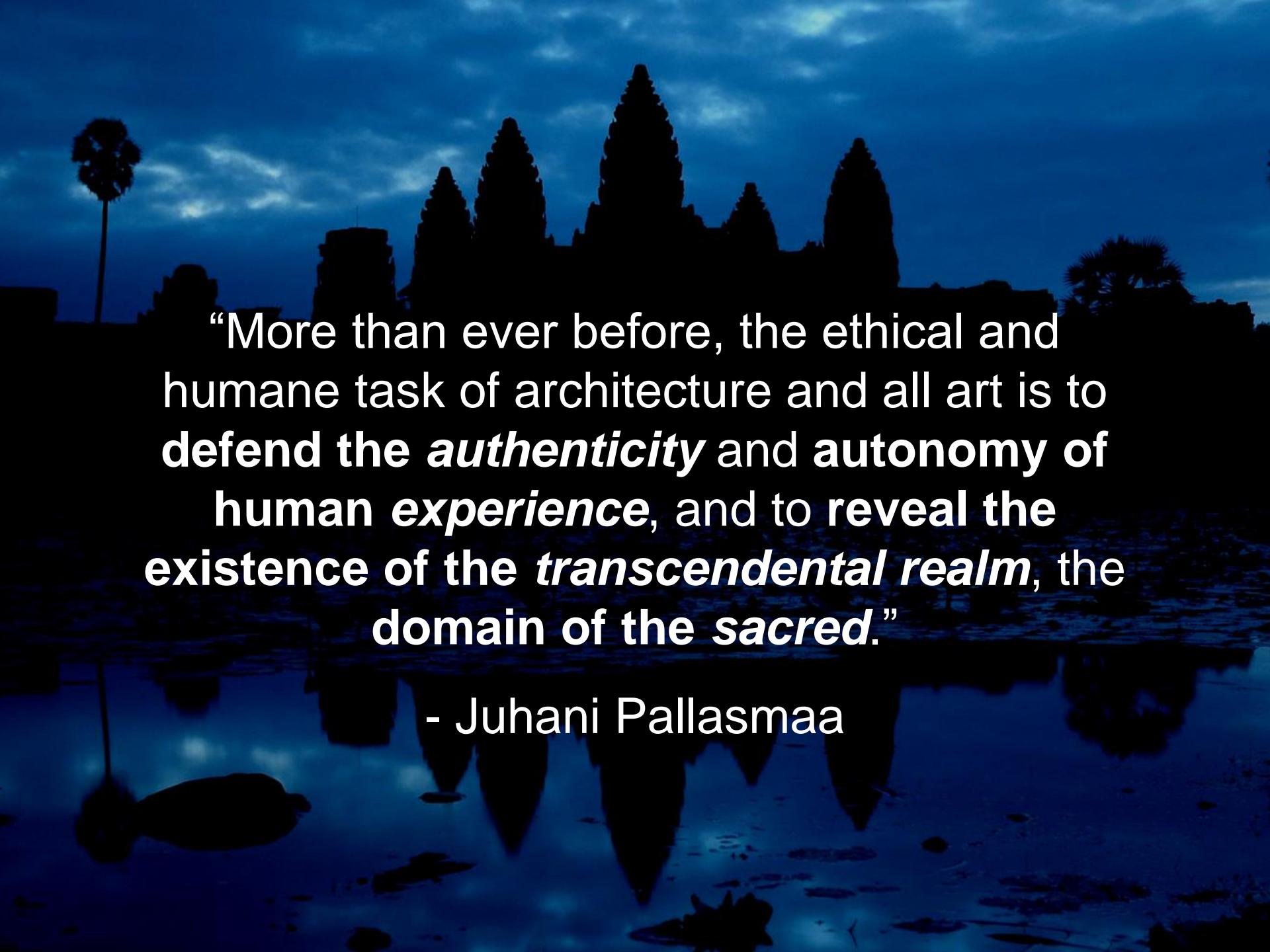










A silhouette of the Angkor Wat temple complex in Cambodia, showing its iconic central tower and surrounding structures against a dark, cloudy sky. The image is framed by palm trees on the left and right sides.

“More than ever before, the ethical and humane task of architecture and all art is to **defend the *authenticity* and *autonomy* of human *experience***, and to **reveal the existence of the *transcendental realm*, the domain of the *sacred*.**”

- Juhani Pallasmaa