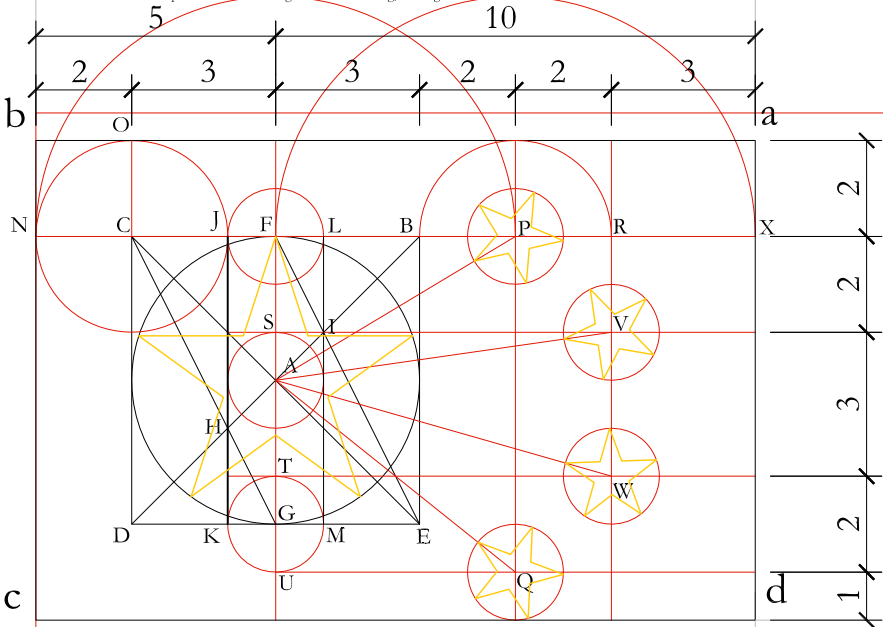
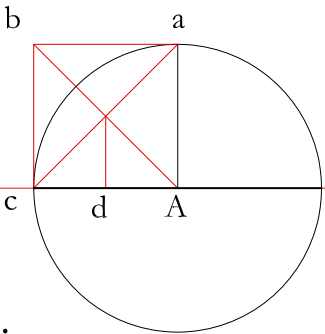


The Banner is a 30:20 (3:2) rectangle. The arrangement of one large star and four smaller stars is located in the upper left quadrant of the Banner. If each quadrant is 10 units high and 15 units long, the large star will fit into a circle that is 6 units in diameter.



1. Draw any square **BCDE** with center **A**. **BC** will equal six units. 2. Divide the square **BCDE** into three parts: a. Draw diagonals **BD** and **CE** and vertical axis **FG**. b. Draw diagonals **CG** and **FE** of the half square. c. The diagonals cross each other at their third points, **H** and **I**. d. Draw vertical lines **JK** through **H** and **LM** through **I**. 3. Draw the circle with center **A** and radius **AF**. **AF** equals 3 units. The large star will fit exactly in this circle. 4. Extend line **CB** to the left and right, and extend **CD** upward. Draw a circle with the center at **B** and a radius equal to **BJ** (2 units) crossing extended **CB** at **N** and extended **BE** at **O**. **N** locates the left edge of the Banner and **O** locates the top edge of the Banner. 5. Draw an arc with center **F** and radius **FN** crossing extended line **BC** at **P** and draw a vertical line through **P**. Draw a circle with center **P** and radius **PB**, crossing extended **BC** at point **R** and draw a vertical line through **R**. Lines **P** and **R** are the vertical axes of the small stars. 6. Draw arc with center **P** and radius **PF** crossing extended line **BC** at **X**. Draw line **ab** through **X** located the vertical center of the Banner. 7. Draw three circles with centers **F**, **A** and **G**, each with a radius of **FJ** (one unit). Circle **A** crosses **FG** at **S** and circle **G** crosses **FG** at **T** and **U**. Draw horizontal lines through **S**, **T** and **U**, intersecting **R** at **V** and **W** and **P** at **Q**. Draw four circles with centers at **P**, **Q**, **V** and **W** and with radius of one unit. The small stars will fit exactly into these circles. 8. Draw radiating lines **AP**, **AV**, **AW** and **AQ**, orienting to the center of the large star.

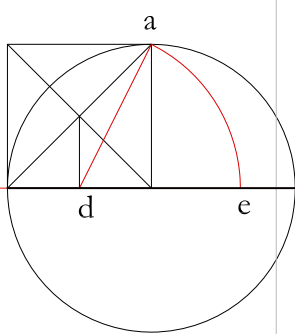


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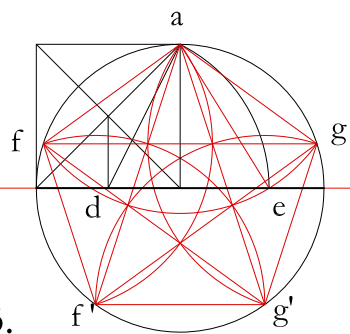
CONSTRUCT A PERFECT FIVE POINTED STAR THAT FITS INTO A 6 UNIT DIAMETER CIRCLE.

1. Draw the circle with its centerlines and construct square **Aabc** in the upper left quadrant. Find point **d** at the midpoint of the base of square **Aabc** by drawing diagonals **ca** and **ba** intersecting at the middle of the square. 2. With the center at **d**, and with a radius of **da**, construct arc **ae** intersecting the horizontal axis at **e**. 3. With the center at **a**, and with a radius of **ae**, construct the arcs **ae** to intersect the circle at points **f** and **g** and the radius equal **ae**. With the centers at **f** and **g**, construct the arcs locating points **f'** and **g'** on the circumference of the circle **A**.

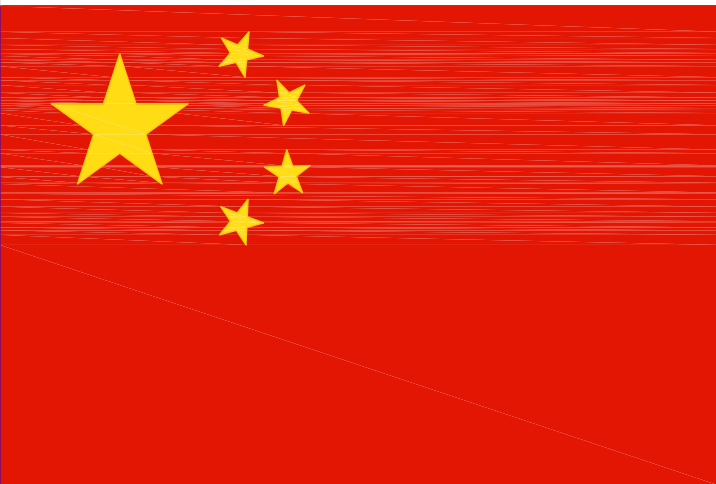
4. Trace the pentagon **agg'f'** and likewise, trace its diagonals **ag'**, **af'**, **gf'** and **fg'** to complete the pentagram.



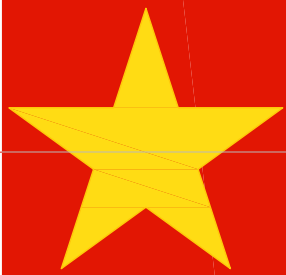
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3.



HOW TO ACCURATELY DRAW THE FLAG OF



CHINA