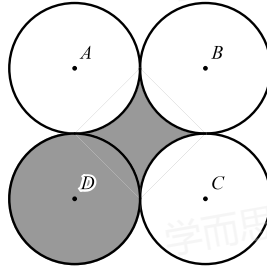


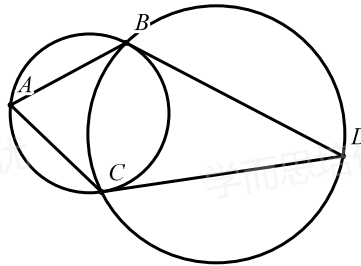
2025 July AMC 10 Week 2 Day 3 - Circles

- 1 (1分) As shown in the figure, it is known that the radius of each of the four circles is 2. What is the area of the shaded part?



- A. 4 B. 12 C. 4π D. 16 E. 8π

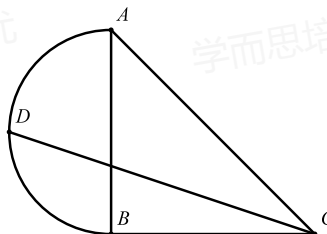
- 2 (1分) Circle BCD passes through the center of circle ABC . If $\angle BDC = 40^\circ$, and $\angle BAC = a^\circ$, what is the value of a ?



- A. 40 B. 50 C. 60 D. 70 E. 80

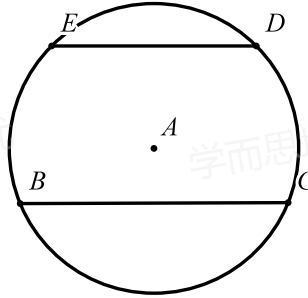
- 3 (1分) $\triangle ABC$ is an isosceles right-angled triangle where $\angle ABC = 90^\circ$ and $AC = 20$.

Construct a semicircle outside $\triangle ABC$ using AB as the diameter. D is a point on the semicircle such that $AD = BD$. What is the length of CD ?



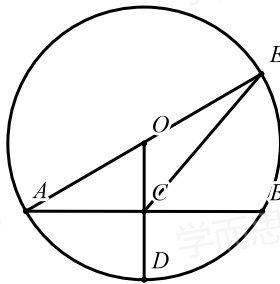
- A. $12\sqrt{2}$ B. $10\sqrt{5}$ C. 25 D. $15\sqrt{2}$ E. $15\sqrt{5}$

- 4 (1分) The distance between two parallel chords inside a circle is 8, and the lengths of the chords are 14 and 18 respectively. What is the area of the circle? (Take $\pi = 3.14$)



- A. 251.2 B. 254.34 C. 257.48 D. 260.62 E. 266.9

- 5 (1分) As shown in the figure, the radius OD of circle O is perpendicular to chord AB at point C . Extend AO to intersect circle O at point E , and connect EC . If $AB = 8$ and $CD = 2$, what is the length of EC ?



- A. $\sqrt{13}$ B. 6 C. $4\sqrt{3}$ D. $5\sqrt{2}$ E. $2\sqrt{13}$