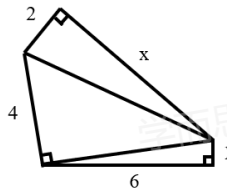


2025 July AMC8 Week 2 Day 3 - Pythagorean Theorem

1 (1分) Andy and Emily start from the same location. Andy walks 5 meters west, and Emily walks 12 meters south. Then Andy walks 3 meters north, and Emily walks 3 meters east. How far apart are they at this point?

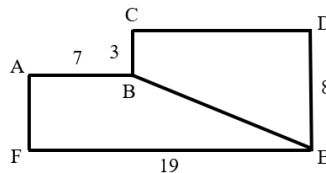
- A. $15m$ B. $\sqrt{269}m$ C. $17m$ D. $20m$ E. $23m$

2 (1分) The figure below consists of three right triangles. What is the value of x ?



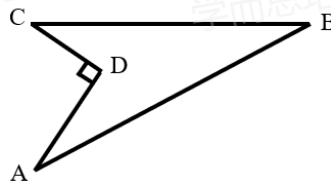
- A. $4\sqrt{2}$ B. 6 C. 7 D. $\sqrt{57}$ E. 8

3 (1分) What is the length of BE ?



- A. 10 B. 11 C. 12 D. 13 E. 14

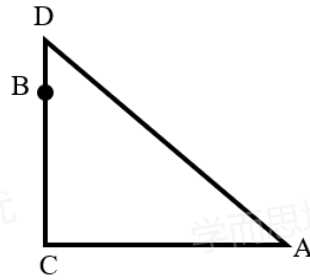
4 (1分) As shown in the figure, there is a lawn. It is known that $AD = 12m$, $CD = 9m$, $AB = 39m$, $BC = 36m$, and $\angle ADC = 90^\circ$. Find the area of this lawn.



- A. 160 B. 189 C. 216 D. 245 E. 270

5

(1分) As shown in the figure, there are two monkeys at point B , which is 10 meters high on a tree. One monkey climbs down the tree to reach point A (a pond 20 meters away from the tree), and the other climbs to the top D of the tree and then jumps directly to A . The distance of the jump is calculated as a straight line. If the distances traveled by the two monkeys are equal, what is the height of the tree in meters?



A. 15

B. 16

C. 17

D. 18

E. 19