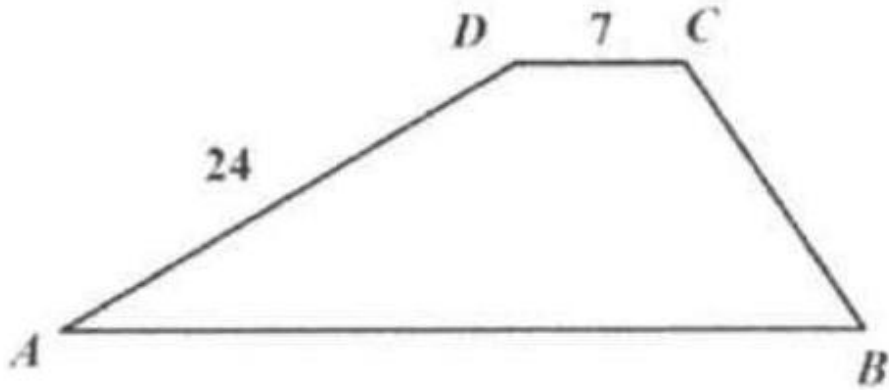


### Problem 3

#### Problem

As shown in the figure,  $ABCD$  is a trapezoid with the bases  $AB$  and  $DC$ .  $AD = 24$ ,  $DC = 7$ ,  $\angle CBA = 45^\circ$  and  $\angle DAB = 30^\circ$ . Find the length of  $AB$ .

- (A)  $12 + \sqrt{3}$
- (B) 13
- (C)  $12\sqrt{3}$
- (D)  $19 + 12\sqrt{3}$
- (E)  $24 + 3\sqrt{3}$



#### Solution

Solution not available.