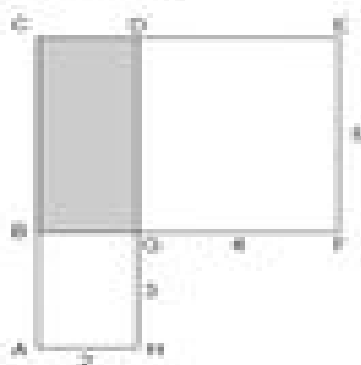


Section 7-6: Areas of Irregular Polygons

1. *Answer: 11, 40%*

In the accompanying figure, $\triangle CDE$ and $\triangle DEF$ are triangles, $AD = 2$, $CE = 3$, $CF = 4$, and $FE = 5$.

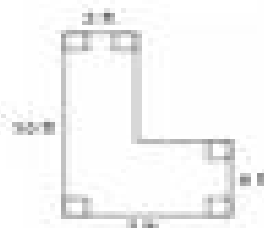


What is the area of $\triangle CDE$?

- (A) 20 (B) 10 (C) 4 (D) 8

2. *Answer: 14, 44%*

Karolina wants to tile the floor shown in the accompanying diagram. If each tile measures 1 foot by 1 foot and costs \$2.99, what will be the total cost, including an 8% sales tax, for tiling the floor?



3. *Answer: 100*

A picnic table in the shape of a regular octagon is shown in the accompanying diagram. If the length of \overline{AD} is 8 feet, find the length of one side of the table to the nearest tenth of a foot, and find the area of the table's surface to the nearest tenth of a square foot.

