

# Area and Perimeter of Composite Shapes (I)

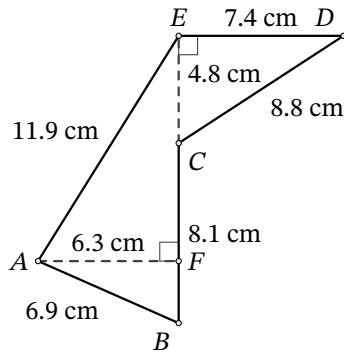
Name: \_\_\_\_\_

Date: \_\_\_\_\_

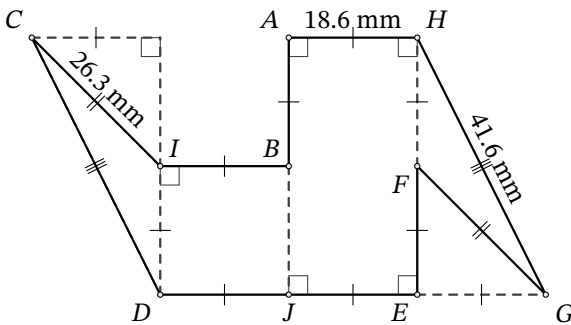
Score: \_\_\_\_\_

Calculate the area and perimeter of each figure. Round to the number of decimals in the measurements.

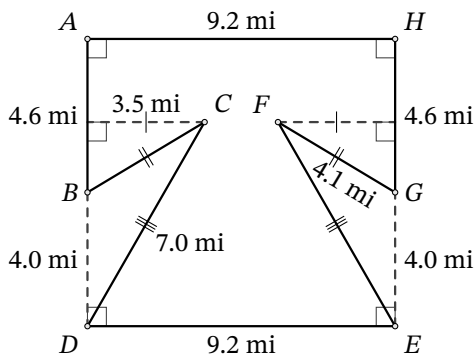
1.



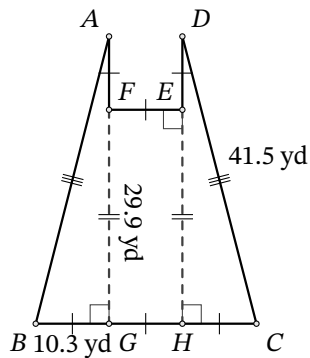
2.



3.



4.



# Area and Perimeter of Composite Shapes (I) Answers

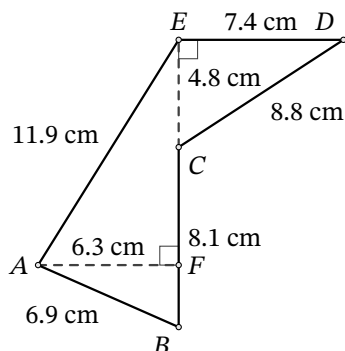
Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Calculate the area and perimeter of each figure. Round to the number of decimals in the measurements.

1.



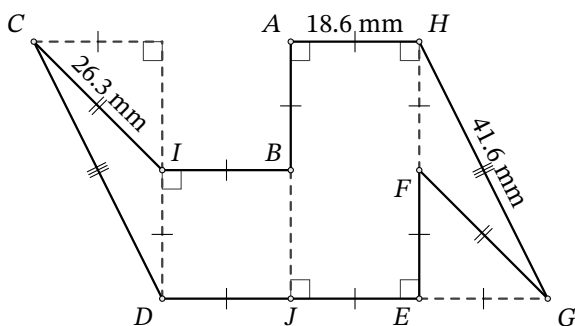
**Area**

$$\begin{aligned} & (\text{Area of } ABE) + (\text{Area of } CDE) \\ &= \left(\frac{12.9 \times 6.3}{2}\right) + \left(\frac{7.4 \times 4.8}{2}\right) \\ &= 40.635 + 17.76 \\ &= 58.4 \text{ cm}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EA \\ &= 6.9 + 8.1 + 8.8 + 7.4 + 11.9 \\ &= 43.1 \text{ cm} \end{aligned}$$

2.



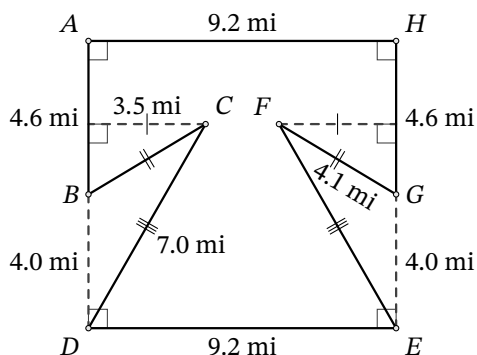
**Area**

$$\begin{aligned} & (\text{Area of } CDI) + (\text{Area of } BDE) + (\text{Area of } FGH) + \\ & (\text{Area of } ABCD) \\ &= \left(\frac{18.6 \times 26.3}{2}\right) + \left(\frac{18.6 \times 41.6}{2}\right) + \left(\frac{18.6 \times 18.6}{2}\right) + \\ & (18.6 \times 37.2) \\ &= 243.99 + 387.48 + 172.98 + 691.92 \\ &= 1395.37 \text{ mm}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BI + IC + CD + DE + EF + FG + GH + HA \\ &= 18.6 + 18.6 + 26.3 + 41.6 + 37.2 + 18.6 + 26.3 + 41.6 + 18.6 \\ &= 247.4 \text{ mm} \end{aligned}$$

3.



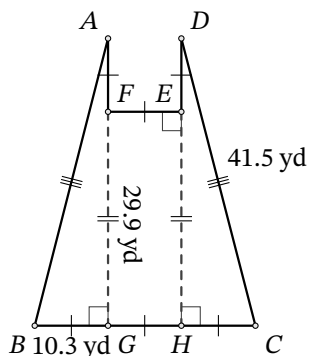
**Area**

$$\begin{aligned} & (\text{Area of } ADE) - (\text{Area of } BCF) - (\text{Area of } EFG) \\ &= \left(\frac{9.2 \times 4.6}{2}\right) - \left(\frac{3.5 \times 4.6}{2}\right) - \left(\frac{4.1 \times 4.6}{2}\right) \\ &= 21.16 - 8.05 - 9.43 \\ &= 3.68 \text{ mi}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EF + FG + GH + HA \\ &= 4.6 + 4.6 + 9.2 + 4.6 + 4.1 + 4.6 + 9.2 + 4.6 \\ &= 49.8 \text{ mi} \end{aligned}$$

4.



**Area**

$$\begin{aligned} & (\text{Area of } ABE) + (\text{Area of } CDE) + (\text{Area of } FGH) \\ &= \left(\frac{10.3 \times 29.9}{2}\right) + \left(\frac{10.3 \times 29.9}{2}\right) + \left(\frac{10.3 \times 29.9}{2}\right) \\ &= 153.03 + 153.03 + 153.03 \\ &= 459.09 \text{ yd}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BE + ED + DC + CF + FE + FA \\ &= 10.3 + 29.9 + 29.9 + 10.3 + 41.5 + 10.3 + 10.3 \\ &= 142.5 \text{ yd} \end{aligned}$$