

# Area and Perimeter of Composite Shapes (F)

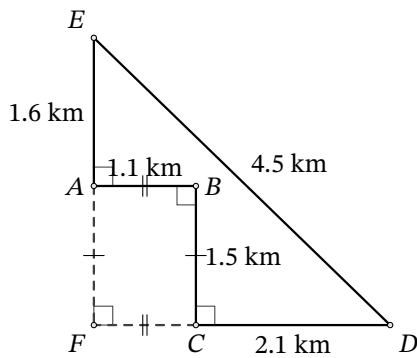
Name: \_\_\_\_\_

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

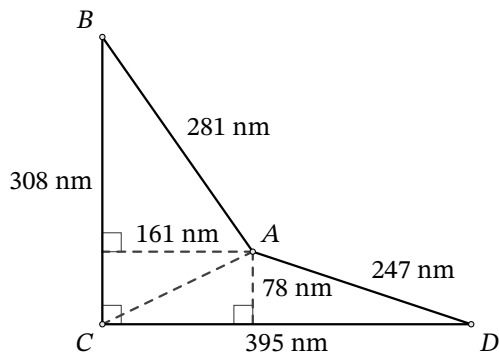
Score: \_\_\_\_\_

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

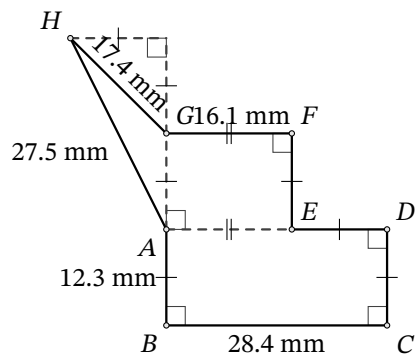
1.



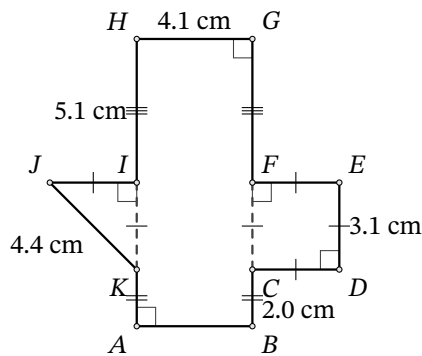
2.



3.



4.



# Area and Perimeter of Composite Shapes (F) Answers

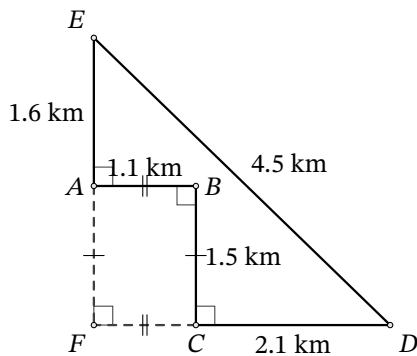
Name: \_\_\_\_\_

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

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

1.



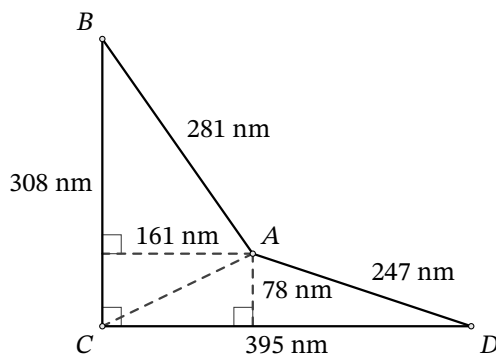
**Area**

$$\begin{aligned} & (\text{Area of } DEF) - (\text{Area of } AFCD) \\ &= \left( \frac{3.2 \times 3.1}{2} \right) - (1.5 \times 1.1) \\ &= 4.96 - 1.65 \\ &= 3.3 \text{ km}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EA \\ &= 1.1 + 1.5 + 2.1 + 4.5 + 1.6 \\ &= 10.8 \text{ km} \end{aligned}$$

2.



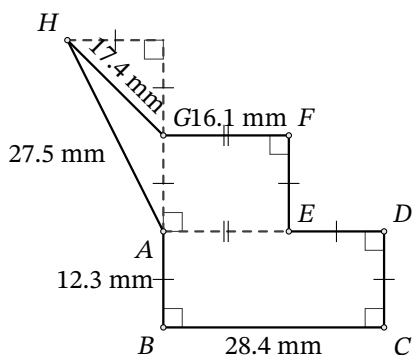
**Area**

$$\begin{aligned} & (\text{Area of } ABC) + (\text{Area of } ACD) \\ &= \left( \frac{308 \times 161}{2} \right) + \left( \frac{395 \times 78}{2} \right) \\ &= 24,794 + 15,405 \\ &= 40,199 \text{ nm}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DA \\ &= 281 + 308 + 395 + 247 \\ &= 1231 \text{ nm} \end{aligned}$$

3.



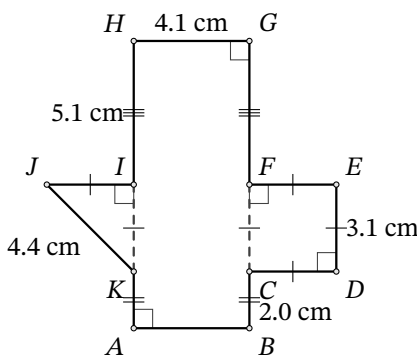
**Area**

$$\begin{aligned} & (\text{Area of } ABCD) + (\text{Area of } AEFGB) + (\text{Area of } AGH) \\ &= (12.3 \times 28.4) + (12.3 \times 16.1) + \left( \frac{12.3 \times 12.3}{2} \right) \\ &= 349.32 + 198.03 + 75.645 \\ &= 623.0 \text{ mm}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EF + FG + GH + HA \\ &= 12.3 + 28.4 + 12.3 + 12.3 + 12.3 + 16.1 + 17.4 + 27.5 \\ &= 138.6 \text{ mm} \end{aligned}$$

4.



**Area**

$$\begin{aligned} & (\text{Area of } IJK) + (\text{Area of } ABGH) + (\text{Area of } CDEF) \\ &= \left( \frac{3.1 \times 3.1}{2} \right) + (10.2 \times 4.1) + (3.1^2) \\ &= 4.805 + 41.82 + 9.61 \\ &= 56.2 \text{ cm}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EF + FG + GH + HI + IJ + JK + KA \\ &= 4.1 + 2.0 + 3.1 + 3.1 + 3.1 + 5.1 + 4.1 + 5.1 + 3.1 + 4.4 + 2.0 \\ &= 39.2 \text{ cm} \end{aligned}$$