

# Area and Perimeter of Composite Shapes (H)

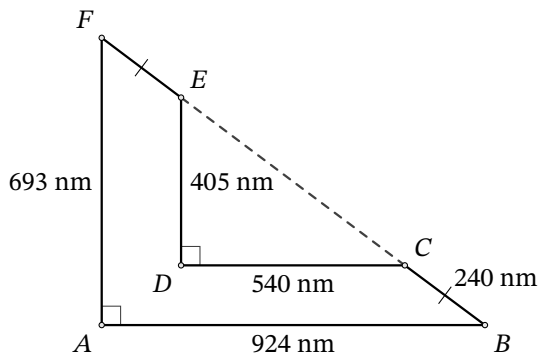
Name: \_\_\_\_\_

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

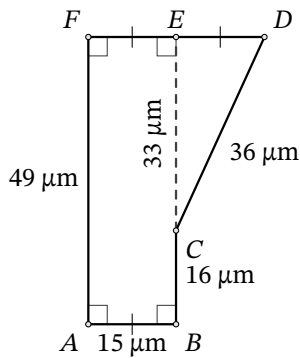
Score: \_\_\_\_\_

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

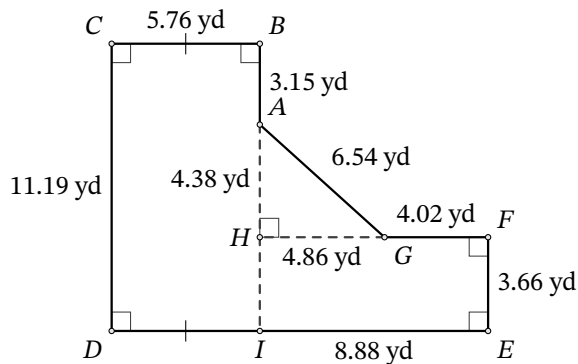
1.



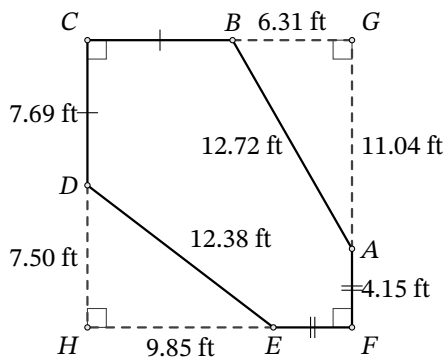
2.



3.



4.



# Area and Perimeter of Composite Shapes (H) Answers

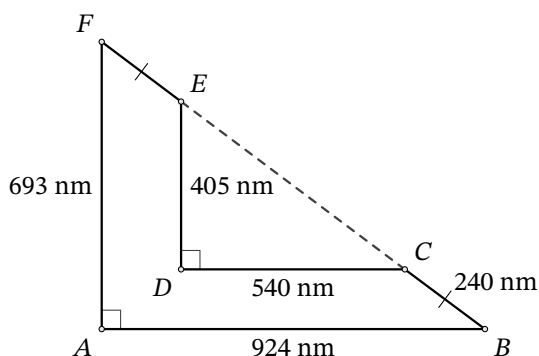
Name: \_\_\_\_\_

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

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

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

1.



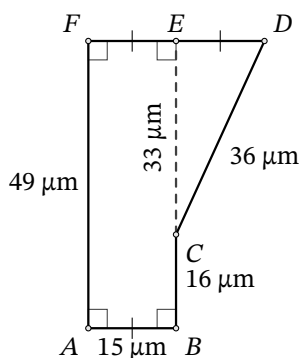
**Area**

$$\begin{aligned} & (\text{Area of } ABF) - (\text{Area of } CED) \\ &= \left( \frac{924 \times 693}{2} \right) - \left( \frac{540 \times 405}{2} \right) \\ &= 320,166 - 109,350 \\ &= 210,816 \text{ nm}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EF + FA \\ &= 924 + 240 + 540 + 405 + 240 + 693 \\ &= 3042 \text{ nm} \end{aligned}$$

2.



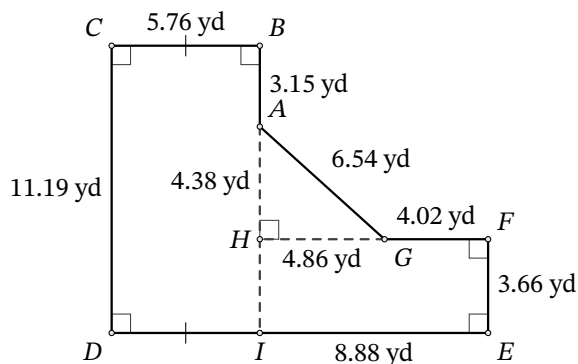
**Area**

$$\begin{aligned} & (\text{Area of } ABEF) + (\text{Area of } CDE) \\ &= (49 \times 15) + \left( \frac{15 \times 33}{2} \right) \\ &= 735 + 247.5 \\ &= 982.5 \text{ } \mu\text{m}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DF + FA \\ &= 15 + 16 + 36 + 30 + 49 \\ &= 146 \text{ } \mu\text{m} \end{aligned}$$

3.



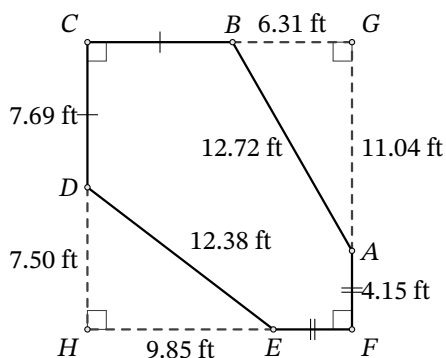
**Area**

$$\begin{aligned} & (\text{Area of } BCDI) + (\text{Area of } EFHI) + (\text{Area of } AHG) \\ &= (11.19 \times 5.76) + (3.66 \times 8.88) + \left( \frac{4.86 \times 4.38}{2} \right) \\ &= 64.4544 + 32.5008 + 10.6434 \\ &= 107.60 \text{ yd}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EF + FG + GA \\ &= 3.15 + 5.76 + 11.19 + 14.64 + 3.66 + 4.02 + 6.54 \\ &= 48.96 \text{ yd} \end{aligned}$$

4.



**Area**

$$\begin{aligned} & (\text{Area of } CHFG) - (\text{Area of } DHE) - (\text{Area of } AGB) \\ &= (15.19 \times 14.00) - \left( \frac{9.85 \times 7.50}{2} \right) - \left( \frac{6.31 \times 11.04}{2} \right) \\ &= 212.66 - 36.9375 - 34.8312 \\ &= 140.89 \text{ ft}^2 \end{aligned}$$

**Perimeter**

$$\begin{aligned} &= AB + BC + CD + DE + EF + FA \\ &= 12.72 + 7.69 + 7.69 + 12.38 + 4.15 + 4.15 \\ &= 48.78 \text{ ft} \end{aligned}$$