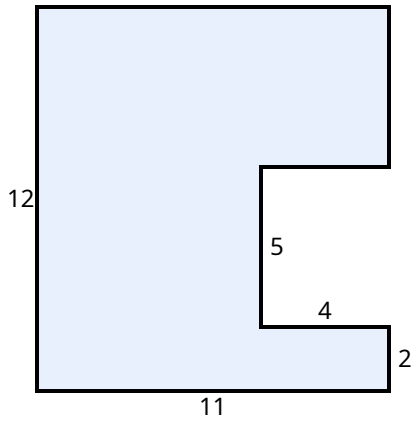




Deconstructing Shapes - set samples - paper 1

Find the area and perimeter of each compound shape. Diagrams are not to scale

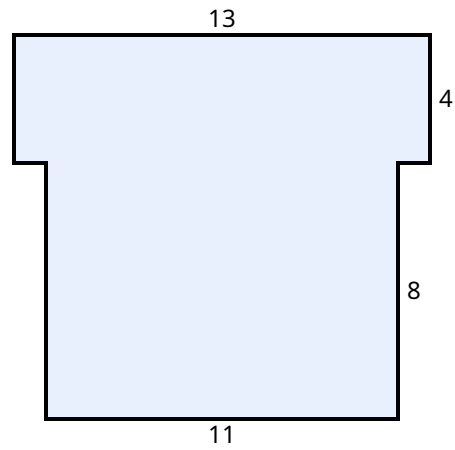
1.



Area _____

Perimeter _____

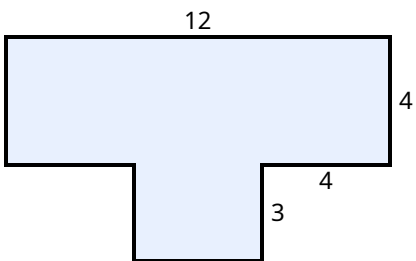
3.



Area _____

Perimeter _____

2.



Area _____

Perimeter _____



Deconstructing Shapes - set samples - Answers

1. C-shape

$$\text{Bounding box} = 11 \times 12 = 132$$

$$\text{Notch cutout} = 4 \times 5 = 20$$

$$\text{Total Area} = 132 - 20 = 112$$

$$\text{Perimeter} = 11 + 5 + 4 + 5 + 4 + 2 + 11 + 12 = 54$$

$$\text{Area: } 112 \text{ units}^2$$

$$\text{Perimeter: } 54 \text{ units}$$

2. T-shape

Split into Rectangle A (top bar) and Rectangle B (stem).

$$\text{Rectangle A} = 12 \times 4 = 48$$

$$\text{Rectangle B} = 4 \times 3 = 12$$

$$\text{Total Area} = 48 + 12 = 60$$

$$\text{Perimeter} = 12 + 4 + 4 + 3 + 4 + 3 + 4 + 4 = 38$$

$$\text{Area: } 60 \text{ units}^2$$

$$\text{Perimeter: } 38 \text{ units}$$

3. T-shape

Split into Rectangle A (top bar) and Rectangle B (stem).

$$\text{Rectangle A} = 13 \times 4 = 52$$

$$\text{Rectangle B} = 11 \times 8 = 88$$

$$\text{Total Area} = 52 + 88 = 140$$

$$\text{Perimeter} = 13 + 4 + 1 + 8 + 11 + 8 + 1 + 4 = 50$$

$$\text{Area: } 140 \text{ units}^2$$

$$\text{Perimeter: } 50 \text{ units}$$