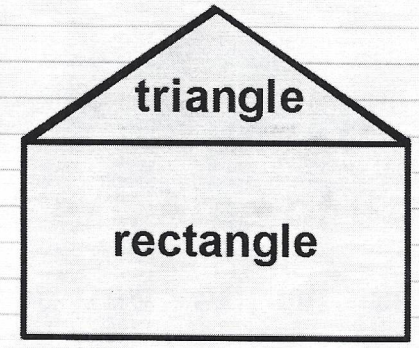
Chapter 4	Area of Polygons
Date	**Lesson 4.3 ext. Area of Composite Figures**
Essential Question	How can you use your knowledge of area to find the area of composite figures?
Vocab	A composite figure is a shape that is made up of triangles, squares, rectangles and other two-dimensional figures.

Example

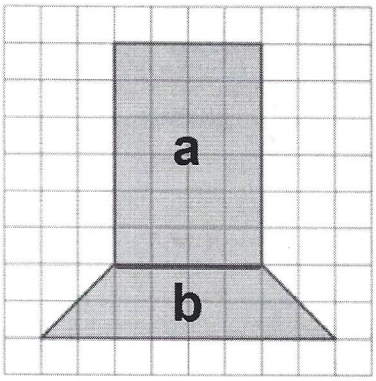


Composition Book

4.3 ext. Area of Composite Figures

Find the area of each composite figure.

1)



a) $A = lw$

$A = 6(4)$

$A = 24 \text{ un.}^2$

b) $A = \frac{1}{2}h(b_1 + b_2)$

$A = \frac{1}{2} \cdot 2(4 + 8)$

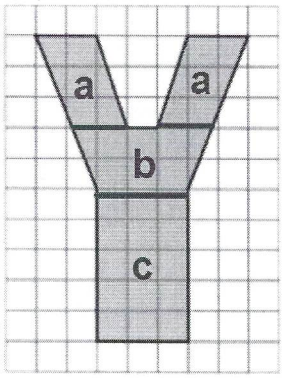
$A = \frac{1}{2} \cdot 2(12)$

$A = 12 \text{ in.}^2$

Area of composite figure is $24 + 12 = 36 \text{ un.}^2$

Find the area of each composite figure.

2)



a) $A = bh$

$A = 3(2)$

$A = 6 \text{ un.}^2$

b) $A = \frac{1}{2}h(b_1 + b_2)$

$A = \frac{1}{2} \cdot 2(3 + 5)$

$A = \frac{1}{2} \cdot 2(8)$

$A = 8 \text{ un.}^2$

c) $A = lw$

$A = 5(3)$

$A = 15 \text{ un.}^2$

The area of the composite figure is

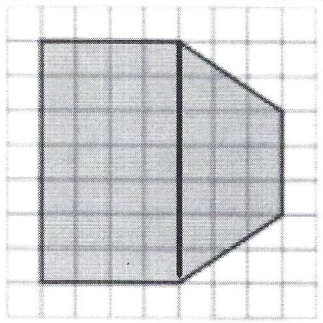
$a + a + b + c$

$6 + 6 + 8 + 15$

35 un.^2

Complete numbers 1 and 2 on your notes page.

1)



$A = lw$

$A = 7(4)$

$A = 28 \text{ un.}^2$

$A = \frac{1}{2}h(b_1 + b_2)$

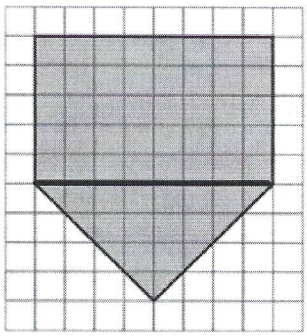
$A = \frac{1}{2}(3)(3 + 7)$

$A = 15 \text{ un.}^2$

The area of the composite figure is

$28 + 15 = 43 \text{ un.}^2$

2)



$A = lw$

$A = 5(8)$

$A = 40 \text{ un.}^2$

$A = \frac{1}{2}(b)h$

$A = \frac{1}{2}(8)4$

$A = 16 \text{ un.}^2$

The area of the composite figure is

$40 + 16 = 56 \text{ un.}^2$