Topic 1

LESSON 1.3b

Slicing and Dicing Composite Figures

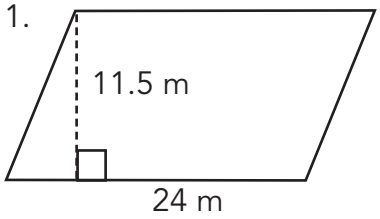
6.G.1

Objective: Area of Triangles and Quadrilaterals

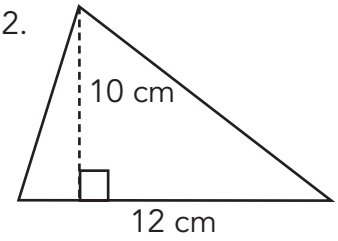
Warm-Up

Use a formula to determine the area of each figure

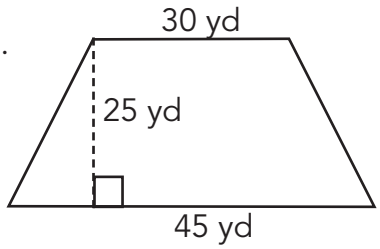
1.



2.



3.

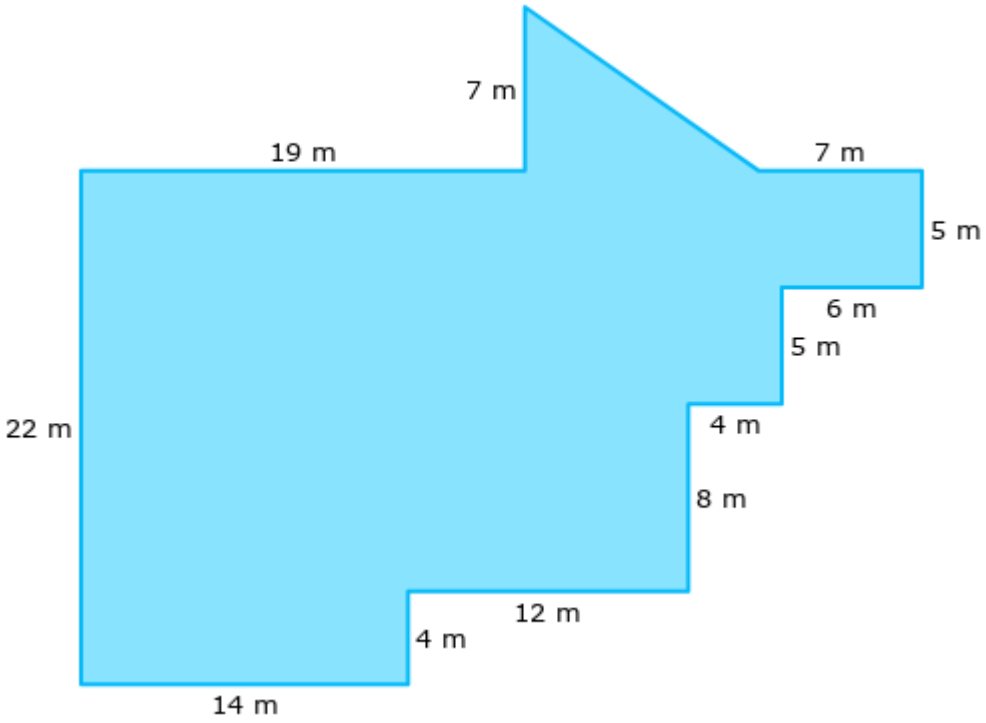


EXPLORE 2

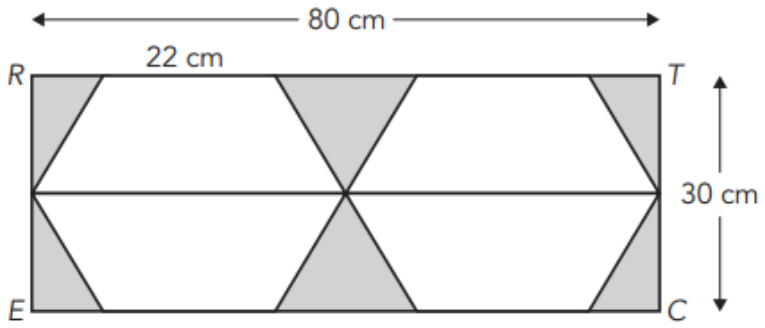
Area of Complex Figures (continued)

Decompose the composite shape in each image into parallelograms, triangles, and/or trapezoids to calculate the approximate area of each. Show your work.

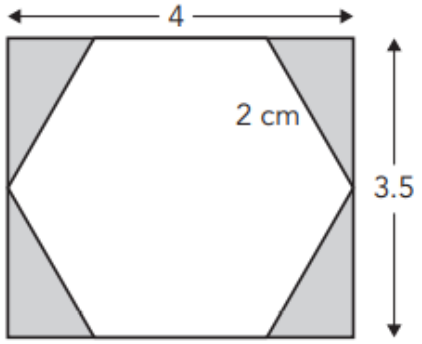
4. Decompose and calculate the area for the shape below



5. The figure shown is composed of a rectangle and four congruent trapezoids. Determine the area of the shaded region.



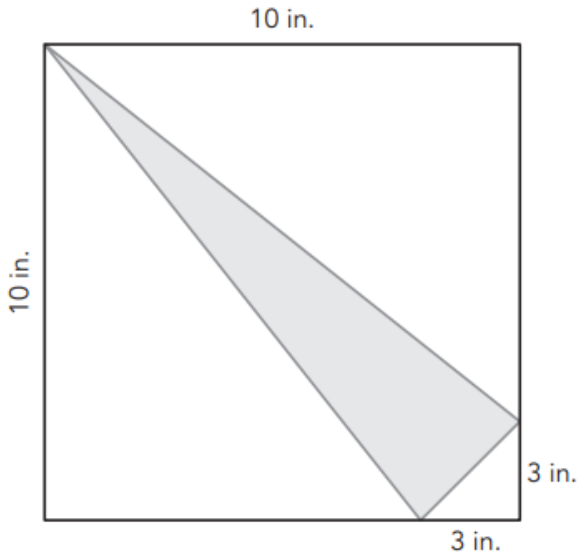
6. The figure shown is composed of a rectangle and a hexagon. The length of each side of the hexagon is 2 centimeters. Determine the area of the shaded region.



Show You KNOW

Use Your Powers of Mathematical Reasoning

1. Determine the area of the shaded triangle inside the square. Explain your strategy.



2. Use Google Slides to create a presentation of your solution strategy for the class.

Name: _____ Date: _____ Class: _____

Homework HW

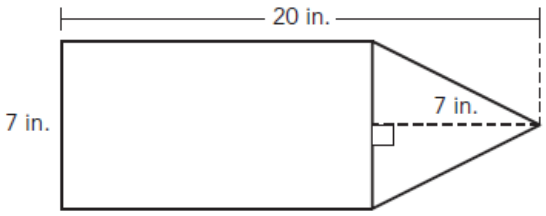
LESSON 1.3b

Slicing and Dicing Composite Figures

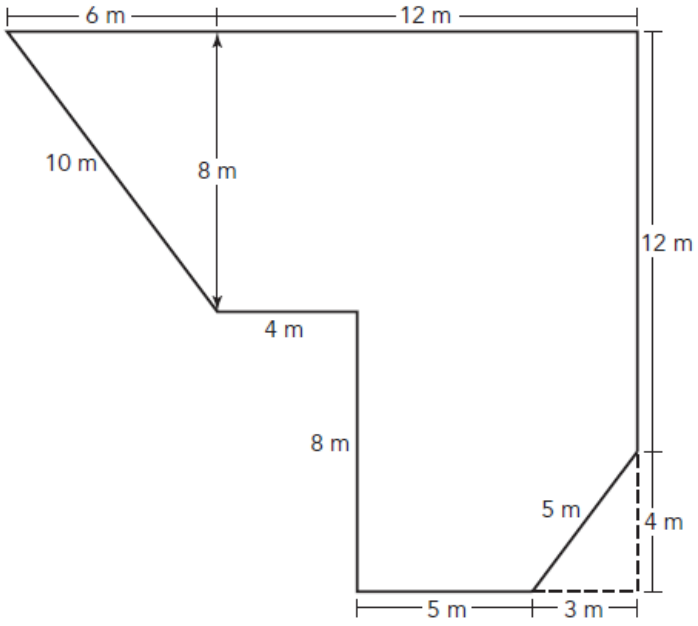
Objective Area of Triangles and Quadrilaterals

Practice

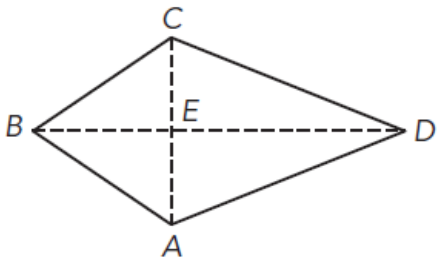
1. Calculate the area of the composite figure.



2. A city wants to create a garden according to the plan below. Calculate the area of the garden.



3. In the given kite, $AE = 6$ ft, $CE = 6$ ft, $BE = 9$ ft, and $DE = 15$ ft. Determine the area of the kite.



4. In the given kite, $SZ = 10$ yards, $WZ = 10$ yards, $TZ = 12$ yards, and $RZ = 32$ yards. Determine the area of the kite.