Name _____ Date _____ Class _____

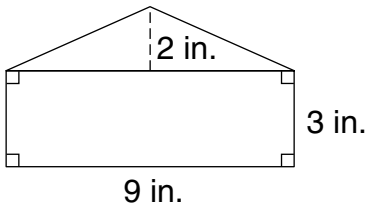
LESSON 10-3

Practice B

Break into Simpler Parts

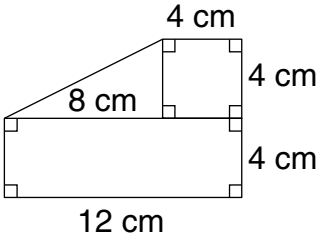
Find the area of each polygon.

1.



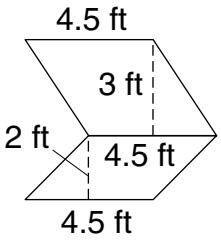
_____

2.



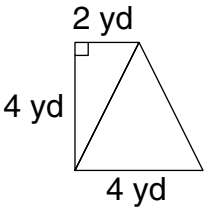
_____

3.



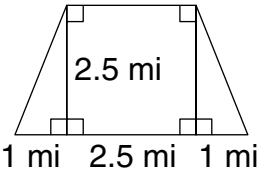
_____

4.



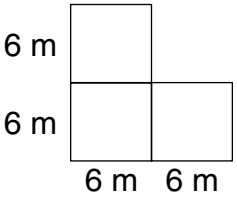
_____

5.



_____

6.



_____

7. Three paintings are shaped like an 8-foot square, a 7-foot by 4-foot rectangle, and a triangle with a 6-foot base and a height of 7 feet. If those paintings are hung together on the outside of a building, how much of the building's wall will they cover altogether?

_____

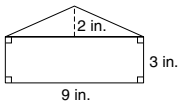
8. Two diagonals divide a square carpet into 4 congruent triangles. The base of each triangle is 5 feet and the height is 2.5 feet. What is the area of the entire carpet?

_____

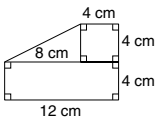
LESSON 10-3 Practice B

Break into Simpler Parts

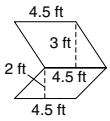
Find the area of each polygon.

1. 

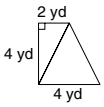
36 in^2

2. 

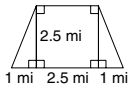
80 cm^2

3. 

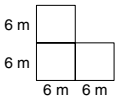
22.5 ft^2

4. 

12 yd^2

5. 

8.75 mi^2

6. 

108 m^2

7. Three paintings are shaped like an 8-foot square, a 7-foot by 4-foot rectangle, and a triangle with a 6-foot base and a height of 7 feet. If those paintings are hung together on the outside of a building, how much of the building's wall will they cover altogether?

113 ft^2

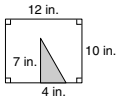
8. Two diagonals divide a square carpet into 4 congruent triangles. The base of each triangle is 5 feet and the height is 2.5 feet. What is the area of the entire carpet?

25 ft^2

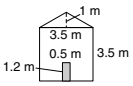
LESSON 10-3 Practice C

Break into Simpler Parts

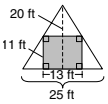
Find the area of each figure. The shaded parts are cut out of the figures.

1. 

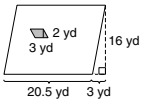
106 in^2

2. 

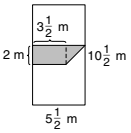
13.4 m^2

3. 

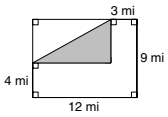
107 ft^2

4. 

322 yd^2

5. 

48 3/4 m^2

6. 

85.5 mi^2

7. The front wall of the shed that Rita built is 9 feet tall and $5\frac{1}{4}$ feet wide. After she cut a section out for a door, the area of that wall was $26\frac{1}{4}$ square feet. If the measurements of the doorway were whole numbers of feet, what size door did Rita install?

a door that is 7 feet tall and 3 feet wide

8. The perimeter of a rectangular playground is 40 yards. It is $1\frac{1}{2}$ yards longer than it is wide. What is the area of that playground?

99 $\frac{7}{16}$ yd^2

LESSON 10-3 Reteach

Break into Simpler Parts

Sometimes you can use area formulas you know to help you find the area of other figures.

To find the area of the figure below, first divide the figure into figures you know.

The figure is made up of a triangle, a parallelogram, and a rectangle.

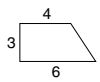
Next, find the area of each figure.

Triangle	Parallelogram	Rectangle
$A = \frac{1}{2}bh$	$A = bh$	$A = \ell w$
$= \frac{1}{2}(3 \cdot 4)$	$= 3 \cdot 4$	$= 4 \cdot 5$
$= 6$	$= 12$	$= 20$

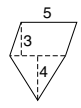
Then, find the sum of all of the areas.

$6 + 12 + 20 = 38$ The area of the figure is 38 square units.

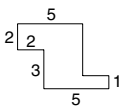
Find the area of each figure.

1. 

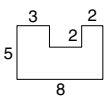
15 square units

2. 

25 square units

3. 

21 square units

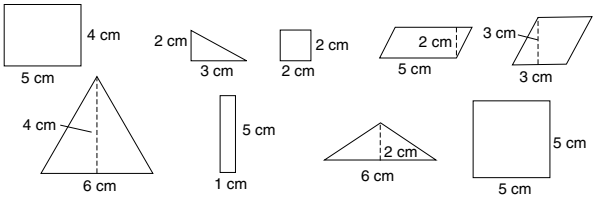
4. 

34 square units

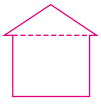
LESSON 10-3 Challenge

Area Combinations

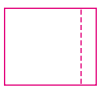
Combine these polygons to draw figures with the given areas. You must use all the polygons, and each can be used only once. Sample answers given



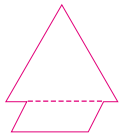
1. Total Area = 26 cm^2



2. Total Area = 30 cm^2



3. Total Area = 22 cm^2



4. Total Area = 16 cm^2