Name _____ Date _____ Class _____

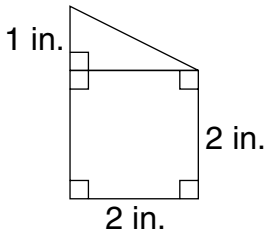
LESSON 10-3

Practice A

Break into Simpler Parts

Find the area of each polygon.

1.



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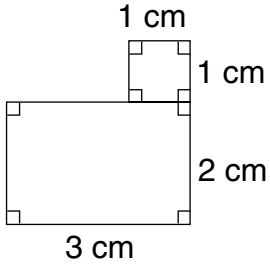
2.



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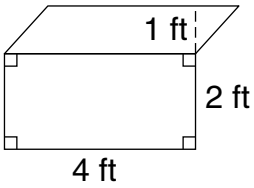
3.



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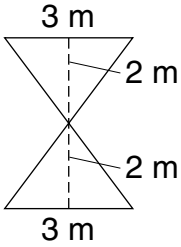
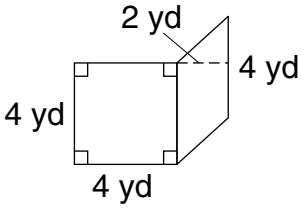
4.



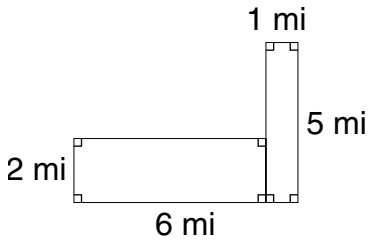
_____

5.



_____

6.



_____

7. A rectangular painting is made up of two congruent squares with sides that measure 2 feet. What is the area of the entire painting?

_____

8. A carpet is made up of two congruent triangles. The base of each triangle is 3 feet and the height is 6 feet. What is the area of the entire carpet?

_____

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LESSON 10-2

Problem Solving

Estimating and Finding Area

Use the table to answer each question.

State Information

State	Approx. Width (mi)	Approx. length (mi)	Water Area (mi^2)
Colorado	280	380	376
Kansas	210	400	462
New Mexico	343	370	234
North Dakota	211	340	1,724
Pennsylvania	160	283	1,239

1. New Mexico is the 5th largest state in the United States. What is its approximate total area?

   126,910 mi^2

2. Kansas is the 15th largest state in the United States. What is its approximate total area?

   84,000 mi^2

3. What is the difference between North Dakota's land area and water area?

   70,016 mi^2

4. What is Pennsylvania's approximate land area?

   45,280 mi^2

5. What is the difference between Colorado's land area and Pennsylvania's land area?

   61,120 mi^2

6. About what percent of the total area of Pennsylvania is covered by land?

   about 97%

Circle the letter of the correct answer.

7. Rhode Island is the smallest state. Its total land area is approximately 1,200 mi^2. Rhode Island is approximately 40 miles long. About how wide is Rhode Island?

   A about 20 mi
   B about 40 mi
   C about 50 mi
   (**D**) about 30 mi

8. The entire United States covers 3,794,085 square miles of North America. About how much of that area is not made up of the 5 states in the chart?

   F 2,537,470 mi^2
   (**G**) 3,359,755 mi^2
   H 3,686,525 mi^2
   J 3,1310,818 mi^2

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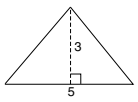
LESSON 10-2

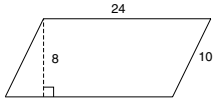
Puzzles, Twisters & Teasers

What's Furry?

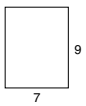
Find the area of each figure below. Then find the letter matching the answer in the Answer Box. To solve the riddle, match the letter of the correct answer to the number of the problem.

1. 

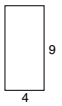
Area = 7.5 units^2

2. 

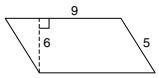
Area = 192 units^2

3. 

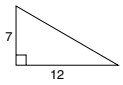
Area = 63 units^2

4. 

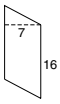
Area = 36 units^2

5. 

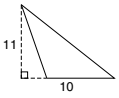
Area = 54 units^2

6. 

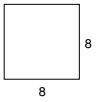
Area = 42 units^2

7. 

Area = 112 units^2

8. 

Area = 55 units^2

9. 

Area = 64 units^2

Answer Box					
A = 112	**D** = 26	**H** = 42	**K** = 64	**N** = 55	**R** = 15
B = 28	**E** = 46	**I** = 63	**L** = 110	**O** = 54	**T** = 26
C = 7.5	**G** = 30	**J** = 240	**M** = 192	**P** = 36	**W** = 72

What do you call a monkey that sells potato chips?

A	C	H	I	P	M	O	N	K
7	1	6	3	4	2	5	8	9

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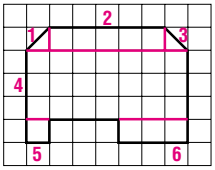
LESSON 10-3

Exploration Recording Sheet

Break into Simpler Parts

Phil and Louise are planning to sod their backyard. Sod is sold in square yards. They sketched their yard on a piece of graph paper, where the side length of each square represents 1 yard.



1. **a.** Use graph paper to divide the figure into several figures.

   b. Name each figure from number 1.

   Possible answer: 1 and 3 triangles; 2, 4, and 6 rectangles; 5 square

   c. Find the area in square yards of each figure.

   $\frac{1}{2}$, 5, $\frac{1}{2}$, 21, 1, 3

   d. Add the areas in part c.

   31 yd^2

Think and Discuss

2. **Discuss** the strategies you used for finding area.

   Possible answer: break the figure into figures you can determine the area for.

3. **Explain** how you could use squares to help you find the areas of different shapes.

   Possible answer: Draw whole squares on different shapes and count them.

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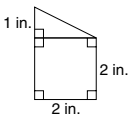
LESSON 10-3

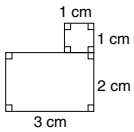
Practice A

Break into Simpler Parts

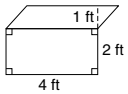
Find the area of each polygon.

1. 

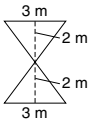
5 in^2

2. 

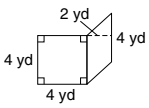
7 cm^2

3. 

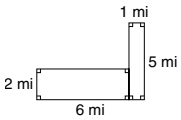
12 ft^2

4. 

6 m^2

5. 

24 yd^2

6. 

17 mi^2

7. A rectangular painting is made up of two congruent squares with sides that measure 2 feet. What is the area of the entire painting?

   8 ft^2

8. A carpet is made up of two congruent triangles. The base of each triangle is 3 feet and the height is 6 feet. What is the area of the entire carpet?

   18 ft^2

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