

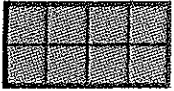
Name _____

Homework & Practice 6-1

Cover Regions

Another Look!

You can find the exact area of the rectangle below by counting the number of unit squares that cover it.

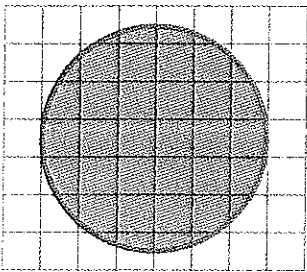


8 unit squares cover the rectangle.

So, the area of the rectangle is 8 square units.

MON. HW
(due Tues.)

Sometimes you need to estimate area. You can combine partially filled squares to approximate full squares.



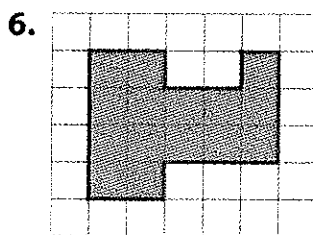
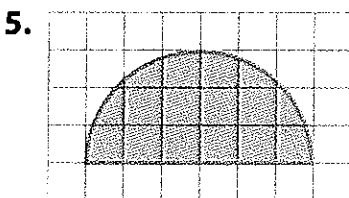
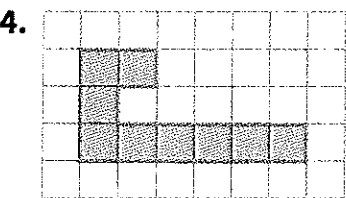
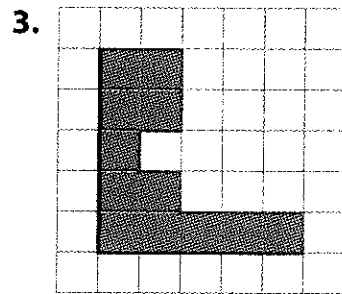
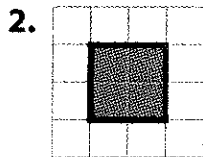
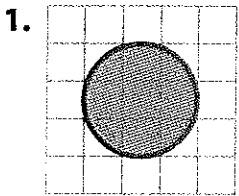
About 28 unit squares cover the shape.

So, the area of the shape is about 28 square units.

Area is the number of unit squares used to cover a region with no gaps or overlaps.

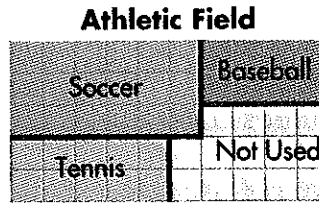


In 1–6, count to find the area of the shapes. Tell if the area is exact or an estimate.



In 7–9, use the diagram at the right.

7. What is the area of the soccer section of the field?



Use the diagram to help make a plan.

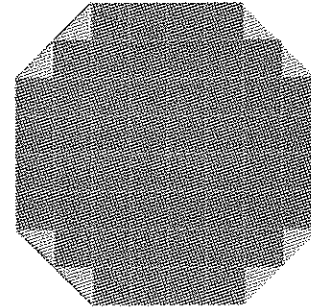


8. What is the area of the field that is **NOT** being used?

9. **Make Sense and Persevere** How many square units of the field are being used?

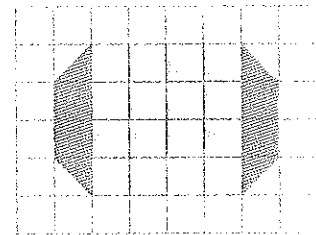
10. **Reasoning** A bookstore has a sale. When customers pay for 2 books, they get another book free. If Pat pays for a box of 16 books, how many books does he get for free? How many books does Pat have? Write division and addition equations to show how the quantities are related.

11. **Higher Order Thinking** Cora makes this design with square and triangular tiles. What is the area of the design? How did you calculate your answer?



Assessment

12. Tyler draws this shape on grid paper. What is area of the shape? Explain how you decided.



TUES. HW
(dveWed)

Name _____



Homework & Practice 6-2

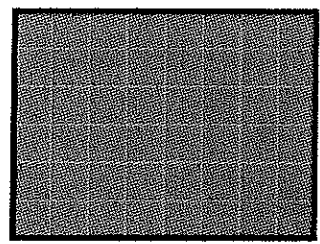
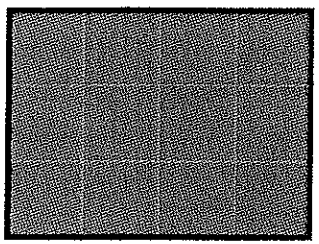
Area: Non-Standard Units


Another Look!


A unit square is a square with sides that are each 1 unit long.

Unit squares can be different sizes. The size of the unit square you use determines the area of a figure.

You can measure area by counting the unit squares that cover a figure.



 = 1 square unit

 = 1 square unit

There are 12 unit squares.

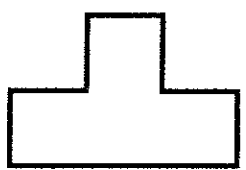
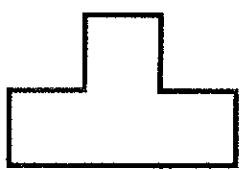
There are 48 unit squares.


The area of this figure is 12 square units.


The area of this figure is 48 square units.

In 1 and 2, draw unit squares to cover the figures and find the area. Use the unit squares shown.

1.

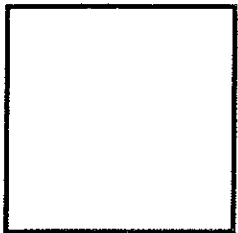
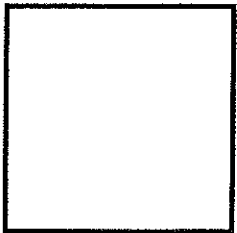



 = 1 square unit


 = 1 square unit

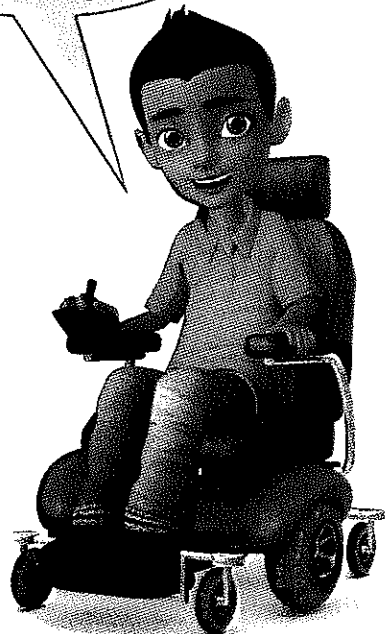
Remember to look at the size of the unit squares that are used for each figure.

2. 10 square units

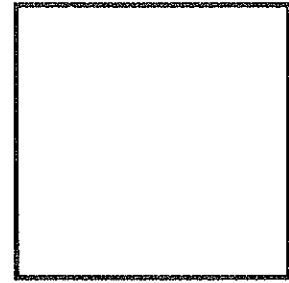


 = 1 square unit

 = 1 square unit



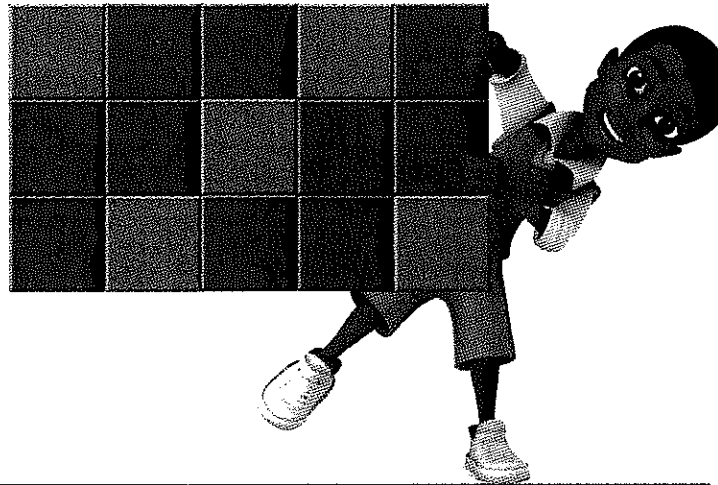
3. **Be Precise** Inez finds the area of this figure is 9 square units. Draw unit squares to cover this figure.



4. **Vocabulary** Fill in the blanks: Yasmeen can cover a figure with 7 rows of 8 _____ to find the figure's _____.

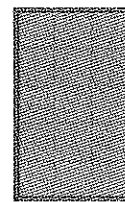
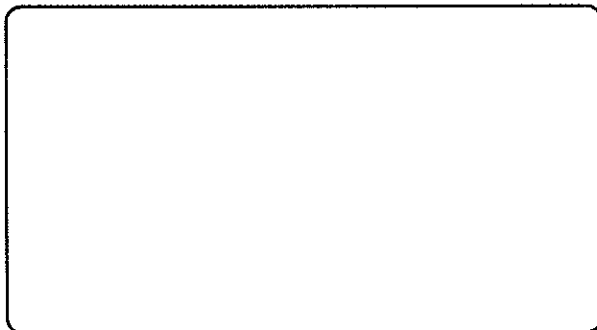
5. **Number Sense** Paula is making gift bags for each of her 5 friends. Each bag will have 6 markers. How many markers will Paula need? Skip count by 5s to find the answer. Then write a multiplication equation to represent the problem.


6. **Higher Order Thinking** Helen makes the rectangle on the right from colored tiles. Each tile is 1 unit square. Helen says the green tiles cover more area than the blue tiles. Do you agree? Explain.



Assessment

7. Rick found the area of this shape is 15 square units. If he used a smaller unit square, would his measurement be greater than 15 square units or less than 15 square units? Explain.



 = 1 square unit

WED. HW (due Thurs.)

Name _____

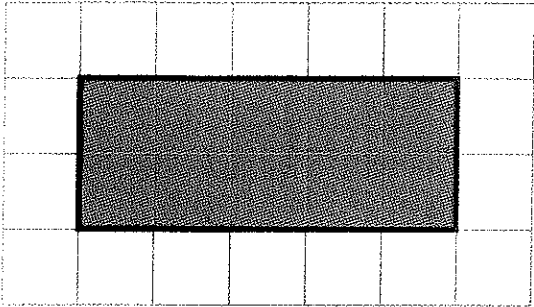


Homework & Practice 6-3

Area: Standard Units


Another Look!

Count how many unit squares cover this figure.



You can use standard units of length to help measure area.

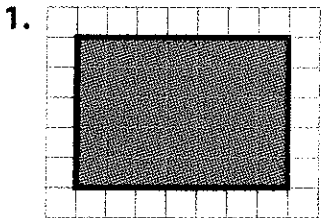



 = 1 square cm

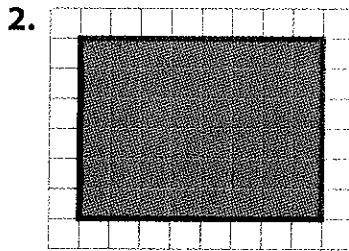
- 10 unit squares cover the figure.
- Each unit square equals 1 square centimeter.


The area of the figure is 10 square centimeters.

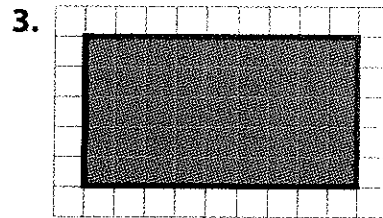
In 1–6, each unit square represents a standard unit. Count the shaded unit squares. Then write the area.




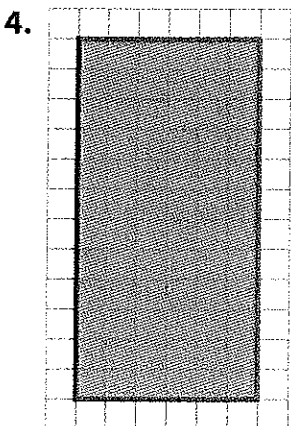
 = 1 square cm




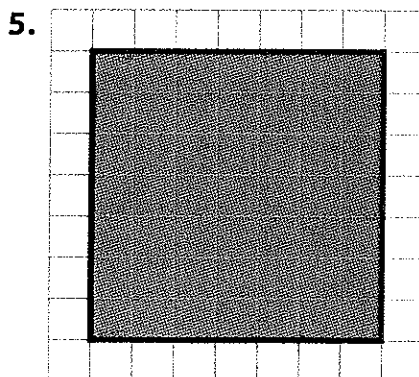
 = 1 square ft




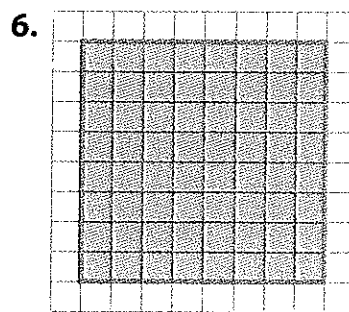
 = 1 square m




 = 1 square m



 = 1 square cm

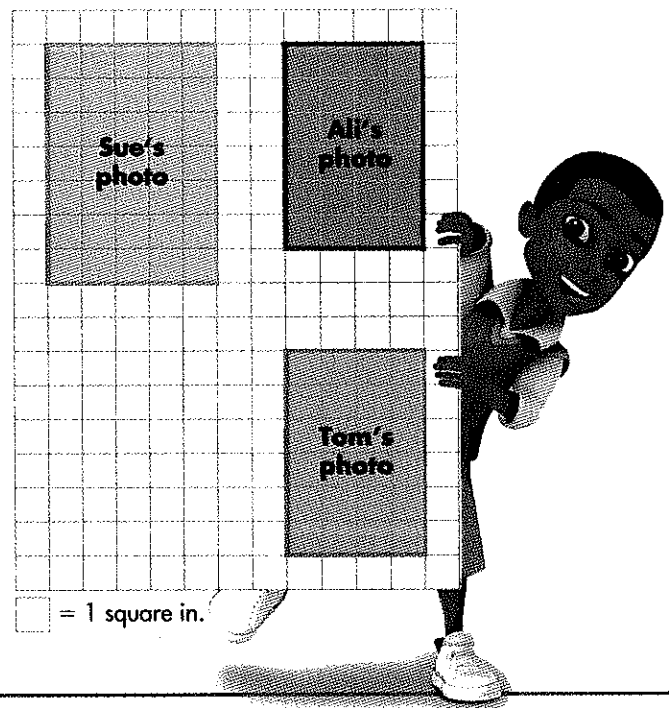


 = 1 square in.

In 7 and 8, use the diagram at the right.

7. **Be Precise** What is the area of Tom's photo? Explain how you know which units to use.

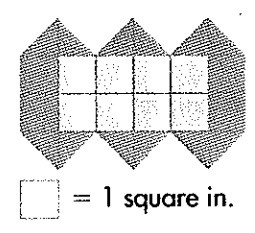
8. What is the area in square inches of all the photos? Explain.



9. **Construct Arguments** Is the area of a desk more likely to be 8 square feet or 8 square inches? Explain.

10. Michele has 5 coins worth \$0.75 in all. What coins does she have?

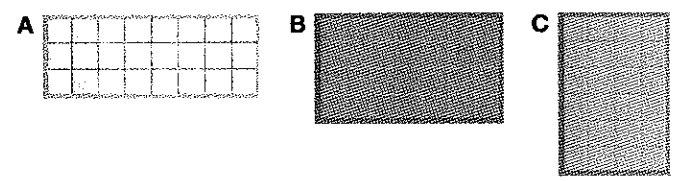
11. **Higher Order Thinking** Sam made the shape at the right from colored tiles. What is the area of the shape? Explain how you found your answer.



Assessment

12. Each of these unit squares represents 1 square meter. Does each figure have an area of 24 square meters? Choose Yes or No.

- Shape A Yes No
- Shape B Yes No
- Shape C Yes No



THURS HW
(due Fri)



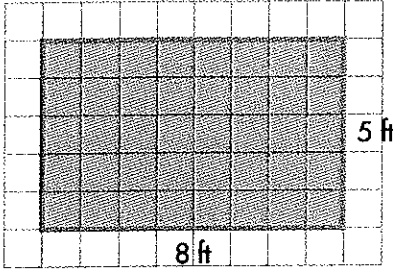
Name _____

Homework & Practice 6-4

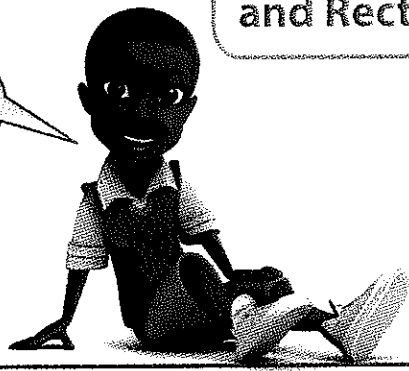
Area of Squares and Rectangles

Another Look!

What is the area of this rectangle?



You can count squares or multiply to find the area.



A. You can count the number of unit squares.

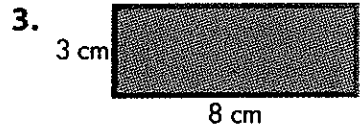
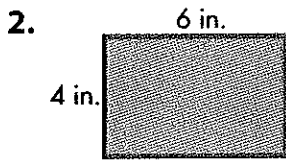
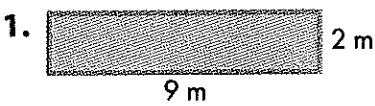
There are 40 unit squares.
Each unit square is 1 square foot.
The area of the rectangle is 40 square feet.

B. You can count the number of rows, and multiply by the number of squares in each row. There are 5 rows, and 8 squares in each row.

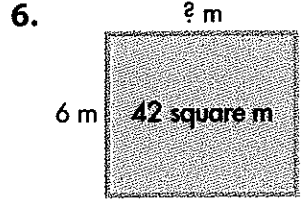
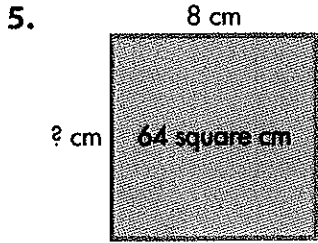
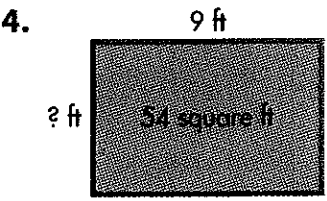
$$5 \times 8 = 40$$

The area of the rectangle is 40 square feet.

In 1-3, find the area.

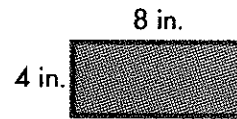


In 4-6, find the missing length of one side. Use grid paper to help.

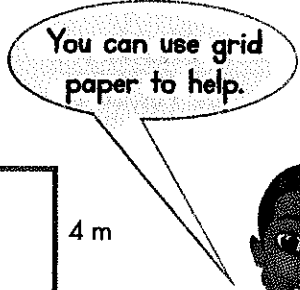
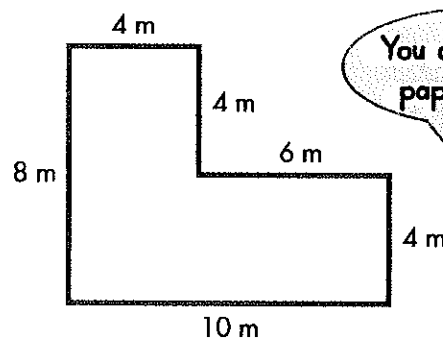


7. **Number Sense** Rachel's family went on a car trip. They traveled 68 miles the first day. They traveled 10 fewer miles the second day. They traveled 85 miles the third day. How many miles did they travel?

8. **Critique Reasoning** Diane says that the area of this shape is 32 square inches, because $4 \times 8 = 32$. Do you agree? Explain.



9. **Higher Order Thinking** Rubin drew this diagram of his garden. How can you divide the shape to find the area? What is the area of the garden?



Assessment

10. Part A

Jerry builds 5 shelves. Complete the equations to show the area of Shelf A.

\times = square feet

Part B

Which is the largest shelf? What is its area? Explain the strategy you used.

