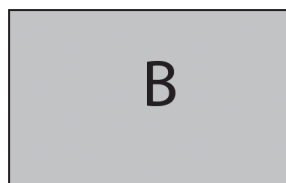
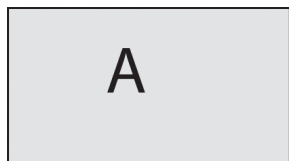


Name _____

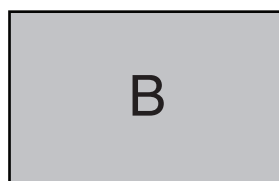
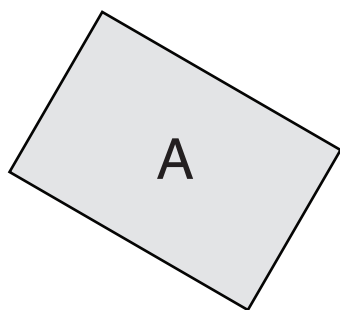
Date _____

CBA Area: Student Sheet 1

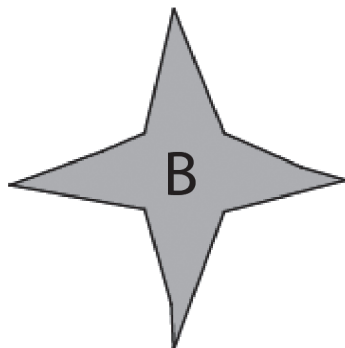
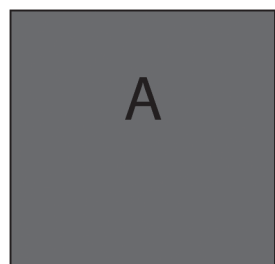
For each pair of shapes, predict which shape has more area inside it. Cut out the shapes to check your answers.



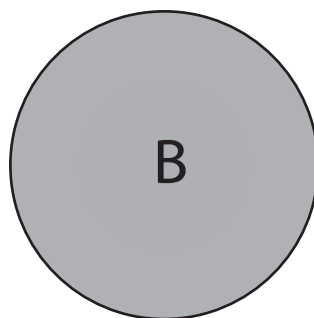
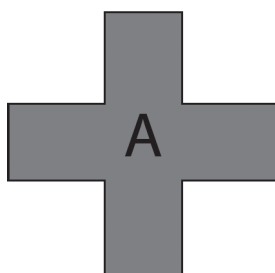
Pair 1.



Pair 2.



Pair 3.



Pair 4.

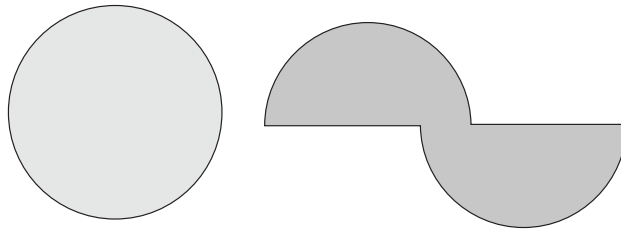
Name _____

Date _____

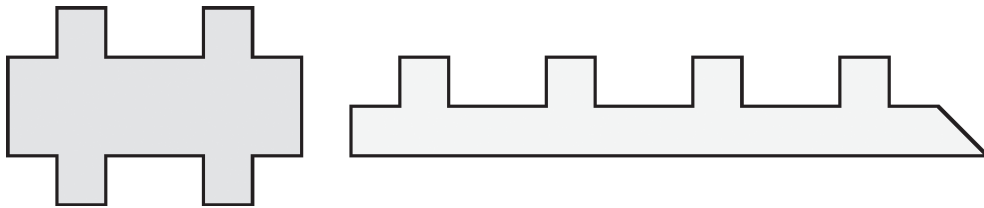
CBA Area: Student Sheet 2

Predict an answer, then cut out the shapes and cut them apart to check.

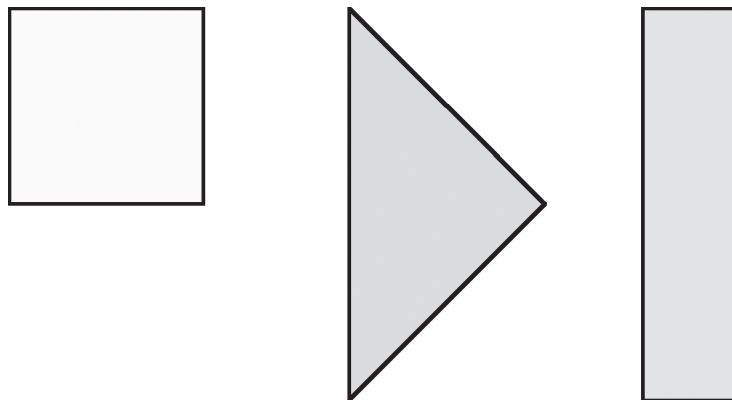
1. Which of these shapes has more area inside it, or do they have the same amount? Explain your answer.



2. Which of these shapes has more area inside it, or do they have the same amount? Explain your answer.



3. Which of these shapes has more area inside it? Which has the least? Do any have the same amount? Explain your answers.



Name _____

Date _____

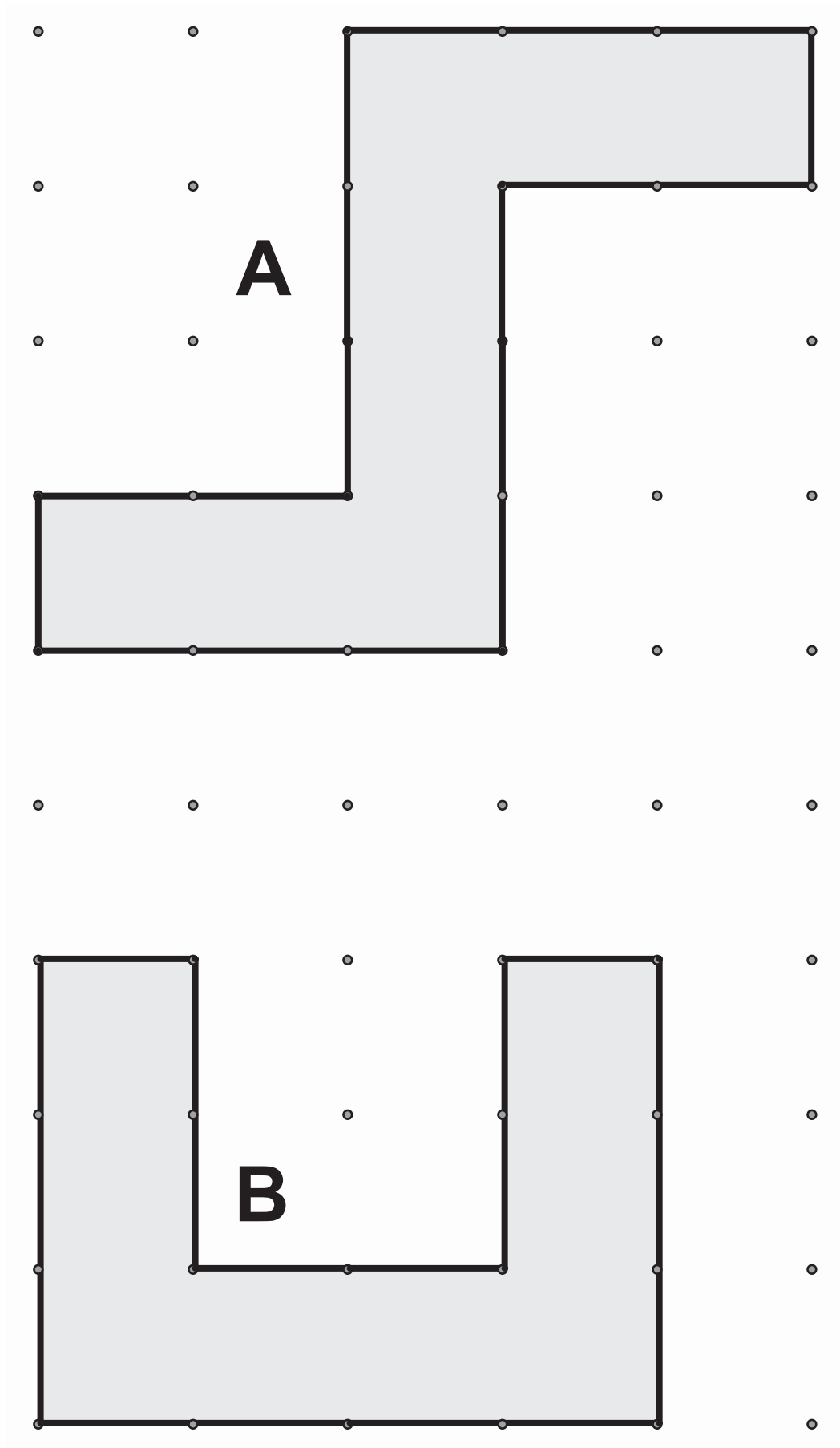
CBA Area: Student Sheet 3

Look at the shapes shown on the next page.

Which shape has more area or room inside it, or do the shapes have the same area?

Find two ways to do this problem.

One way is to count something, the other way does not use counting.



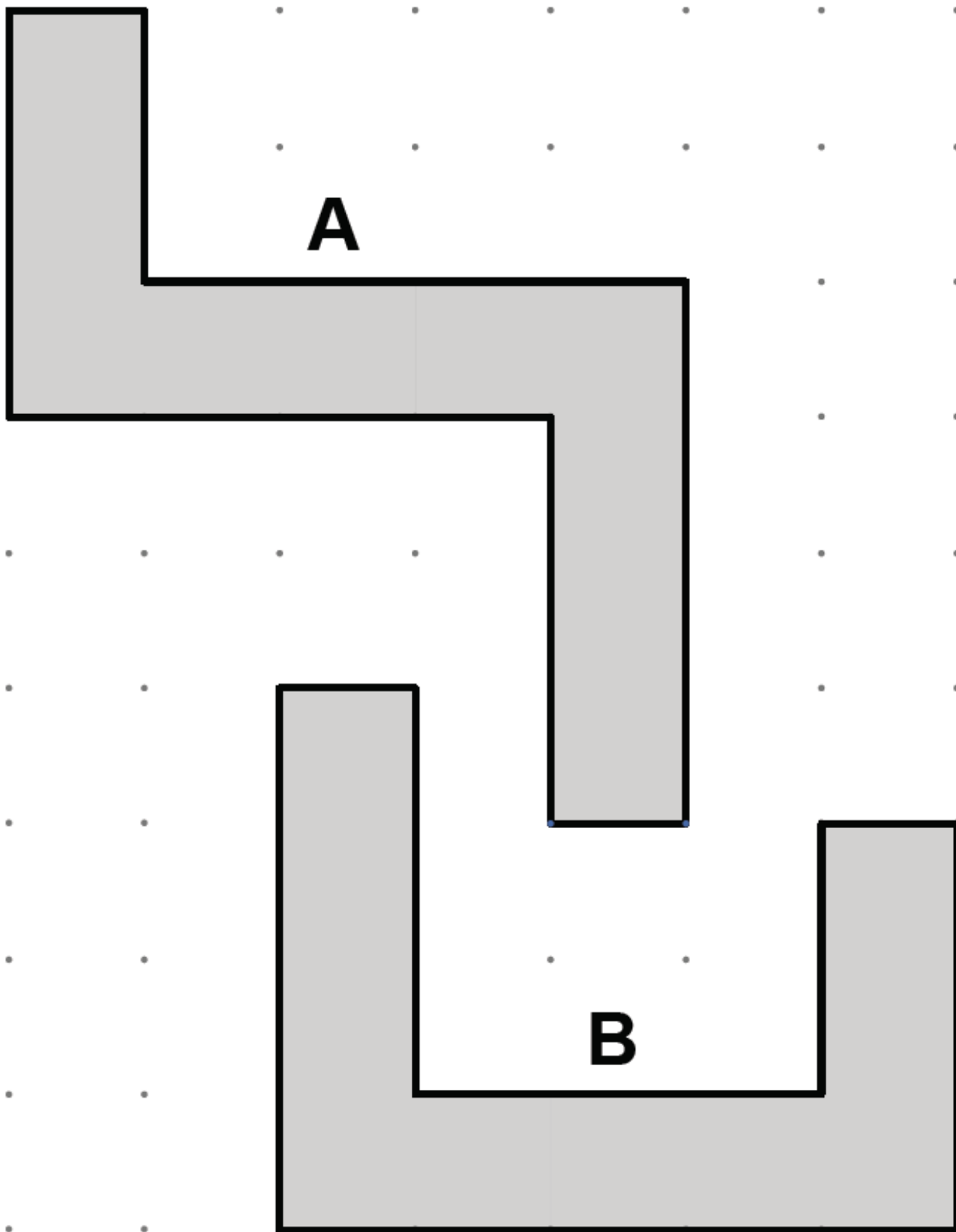
Name _____

Date _____

CBA Area: Student Sheet 4

Look at the shapes shown on the next page.

Which shape has more area or room inside it, or do the shapes have the same area?

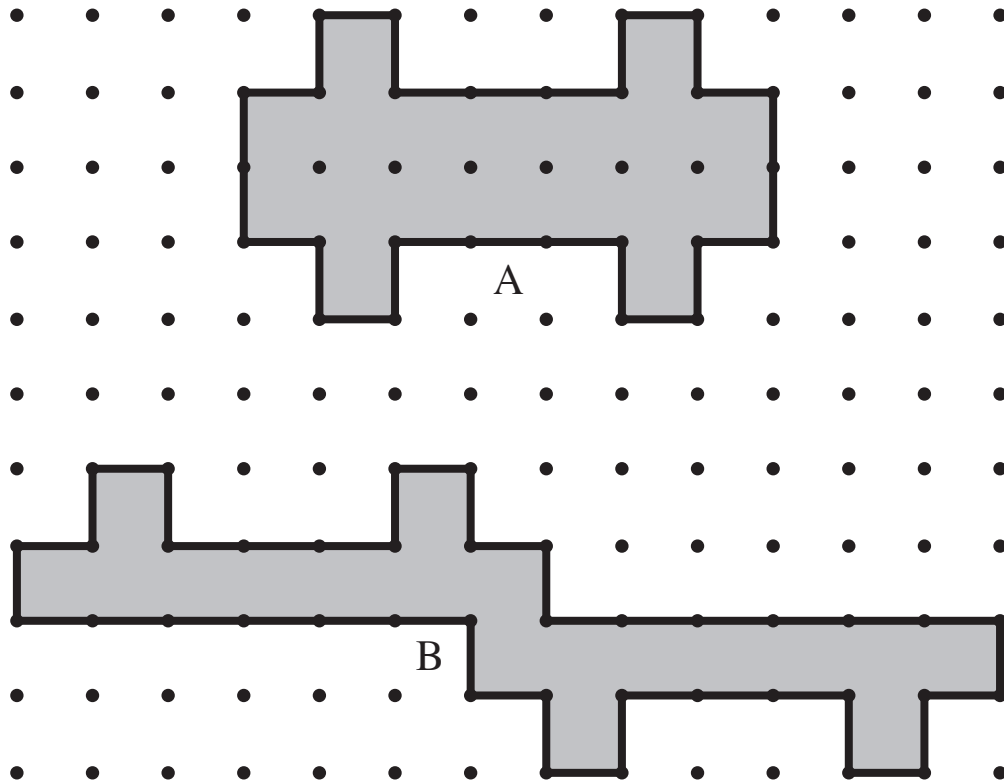


Name _____

Date _____

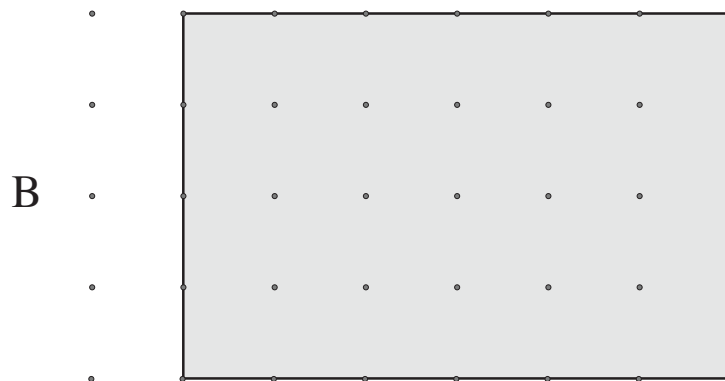
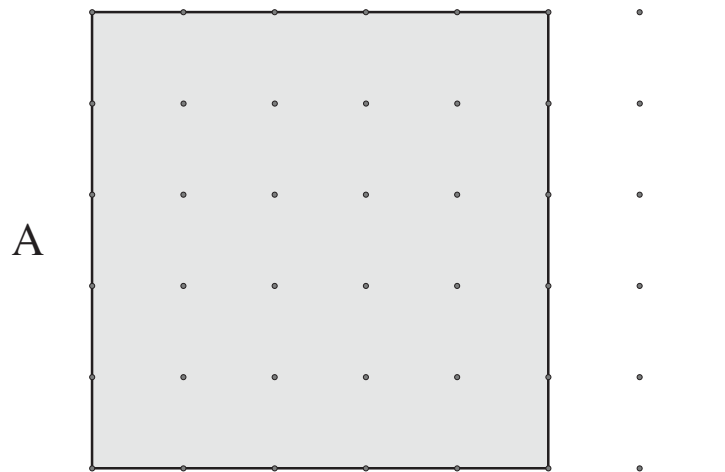
CBA Area: Student Sheet 5

1. Which of these two shapes has more area or room inside it, or do they have the same amount? Find two ways to do this problem. One way should involve counting; the other way should not.



CBA Area: Student Sheet 5 (*Continued*)

2. Let's pretend these are two chocolate bars. Which one would be bigger and have more to eat?
Find two ways to do this problem. One way should involve counting; the other way should not.

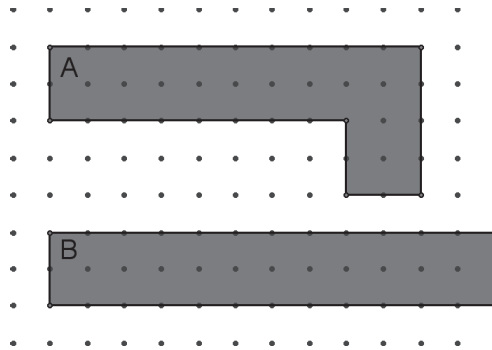


Name _____

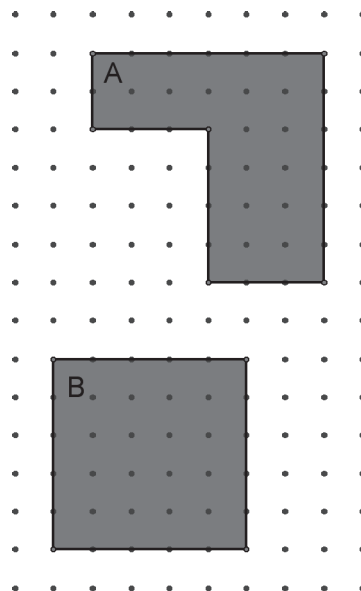
Date _____

CBA Area: Student Sheet 6

1. Which of these two shapes has more area or room inside it, or do they have the same amount?



2. Which of these two shapes has more area or room inside it, or do they have the same amount?

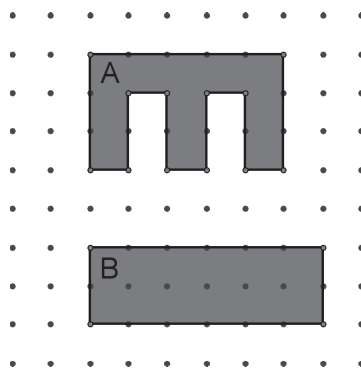


Name _____

Date _____

CBA Area: Student Sheet 6 (*Continued*)

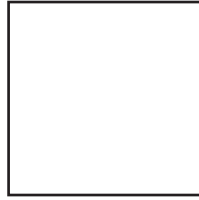
3. Which of these two shapes has more area or room inside it, or do they have the same amount?



Name _____

Date _____

CBA Area: Student Sheet 7

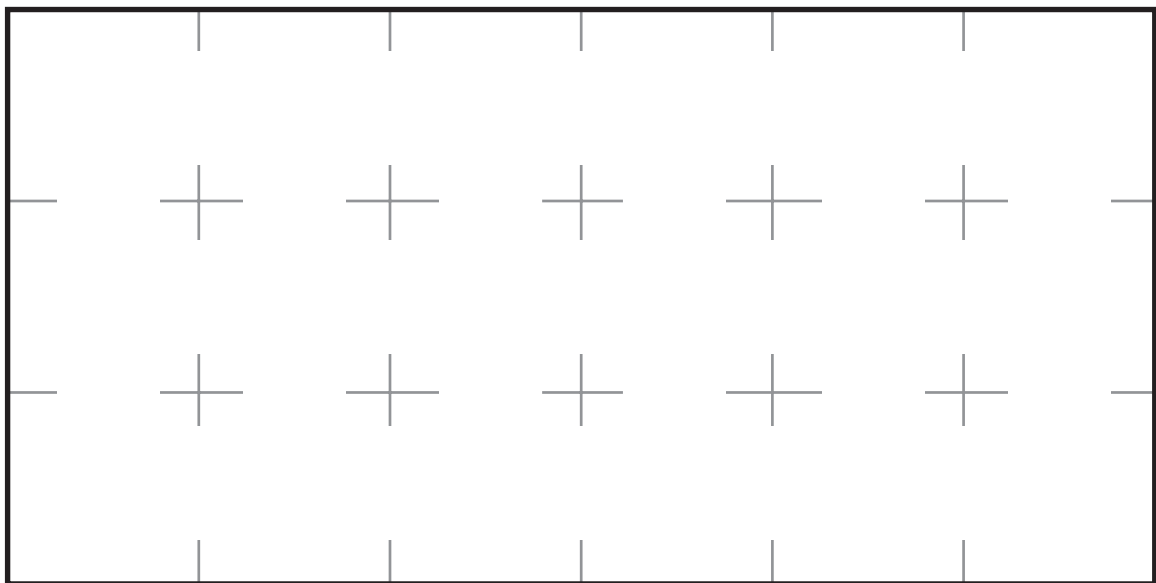


How many square tiles like this are needed to cover the rectangle below?

Predict without drawing _____

Predict after drawing _____

Check with square tiles _____



Name _____

Date _____

CBA Area: Student Sheet 8

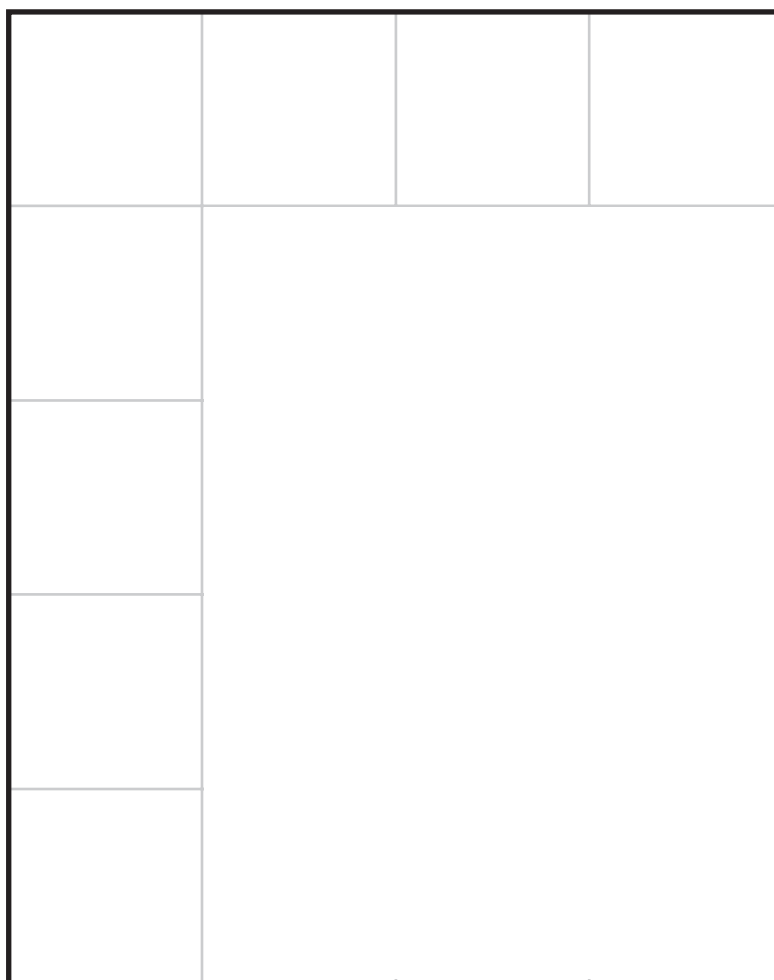


How many square tiles like this are needed to cover the rectangle below?

Predict without drawing _____

Predict after drawing _____

Check with square tiles _____



Name _____

Date _____

CBA Area: Student Sheet 9

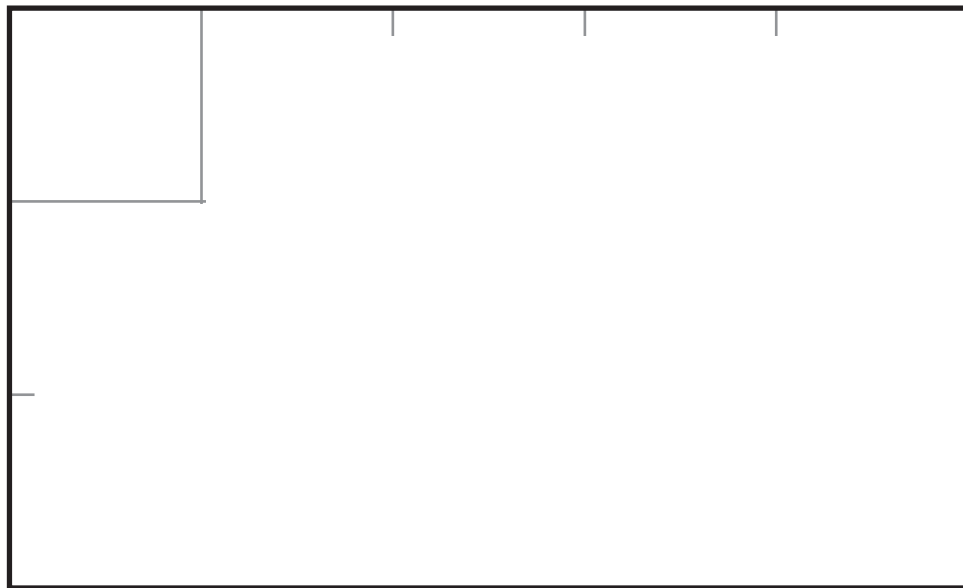


How many square tiles like this are needed to cover the rectangle below?

Predict without drawing _____

Predict after drawing _____

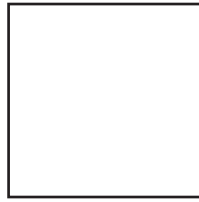
Check with square tiles _____



Name _____

Date _____

CBA Area: Student Sheet 10

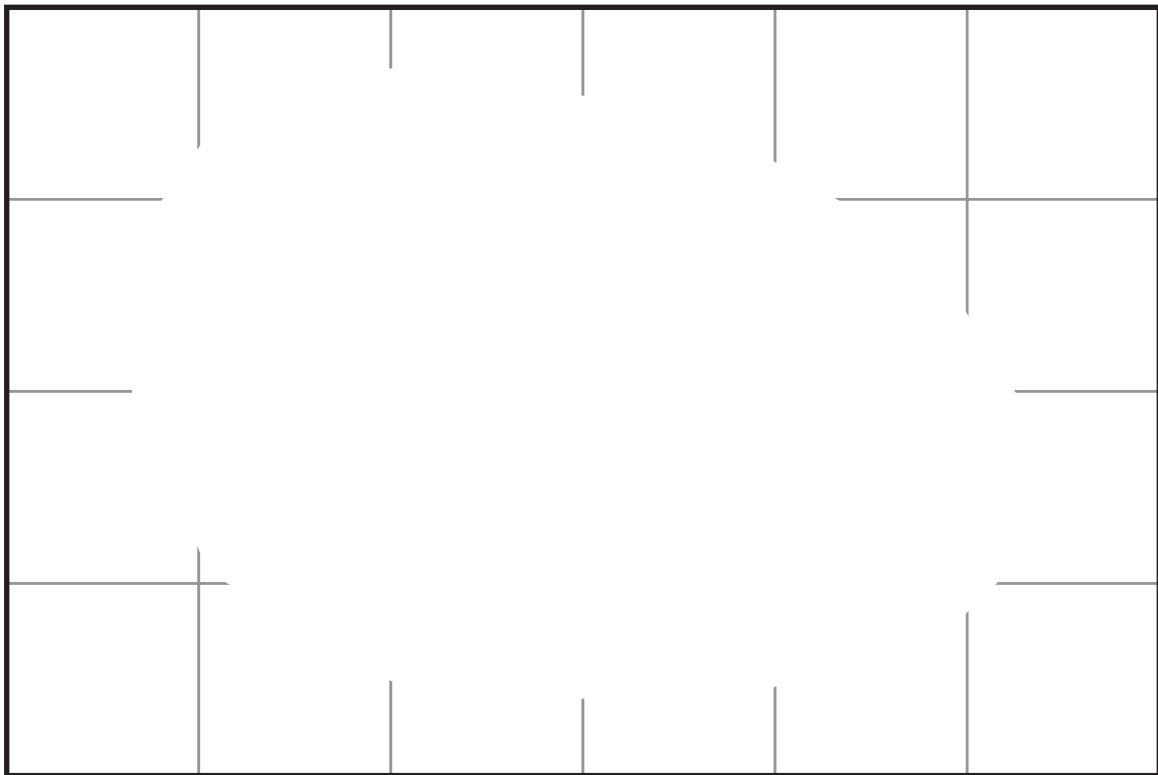


How many square tiles like this are needed to cover the rectangle below?

Predict without drawing _____

Predict after drawing _____

Check with square tiles _____



Name _____

Date _____

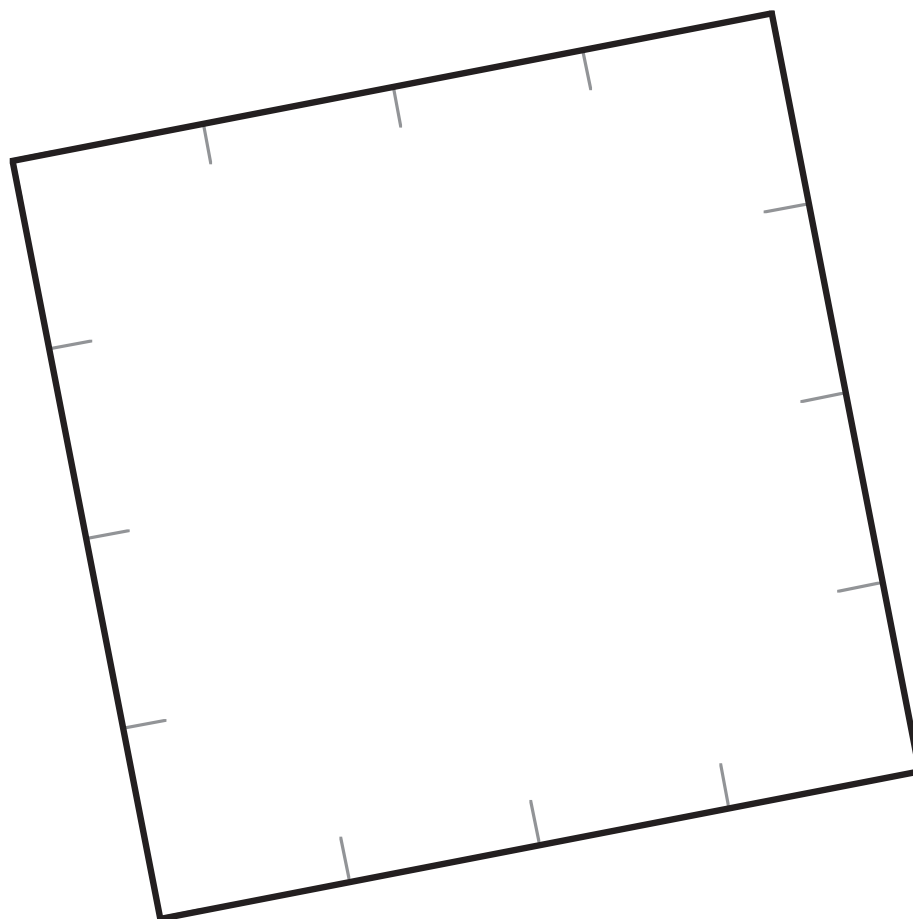
CBA Area: Student Sheet 11

Predict which of these two shapes is BIGGER on the inside. Check your answer with squares.

Prediction _____

Check _____

A

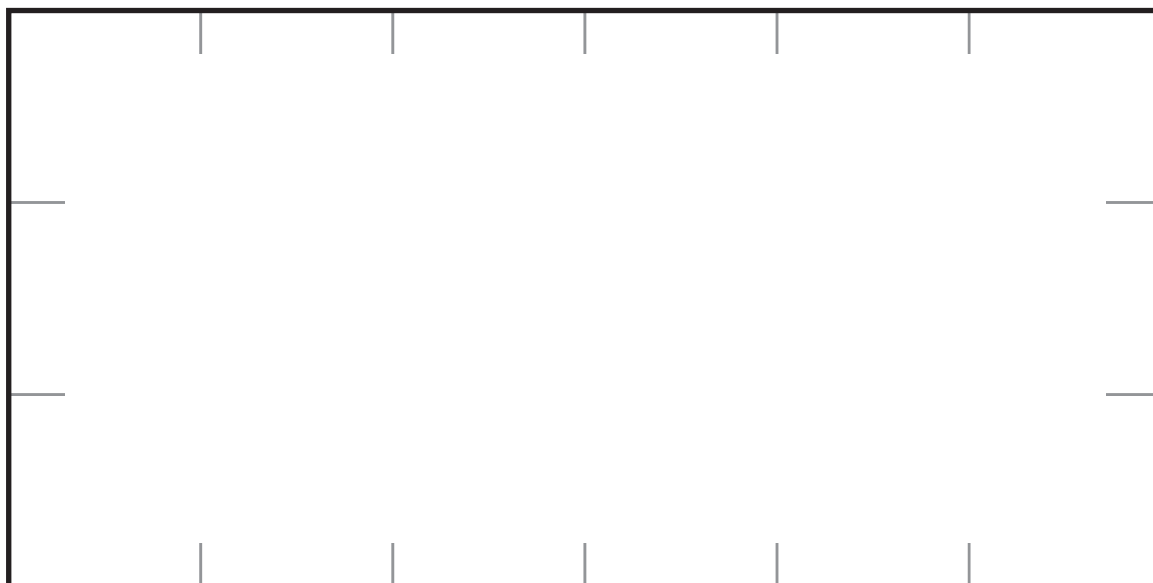


Name _____

Date _____

CBA Area: Student Sheet 11 (*Continued*)

B



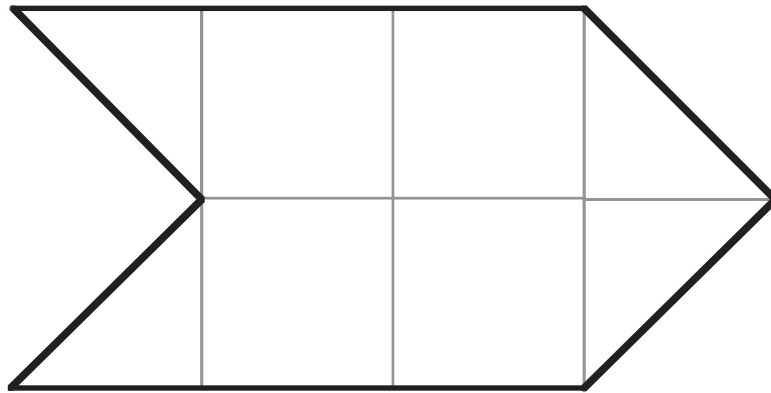
Name _____

Date _____

CBA Area: Student Sheet 12: Dealing with Fractional Units of Area, Part 1

1. Which of these two shapes is **BIGGER** on the inside, or are they the same? How can you prove your answer is correct?

A



B

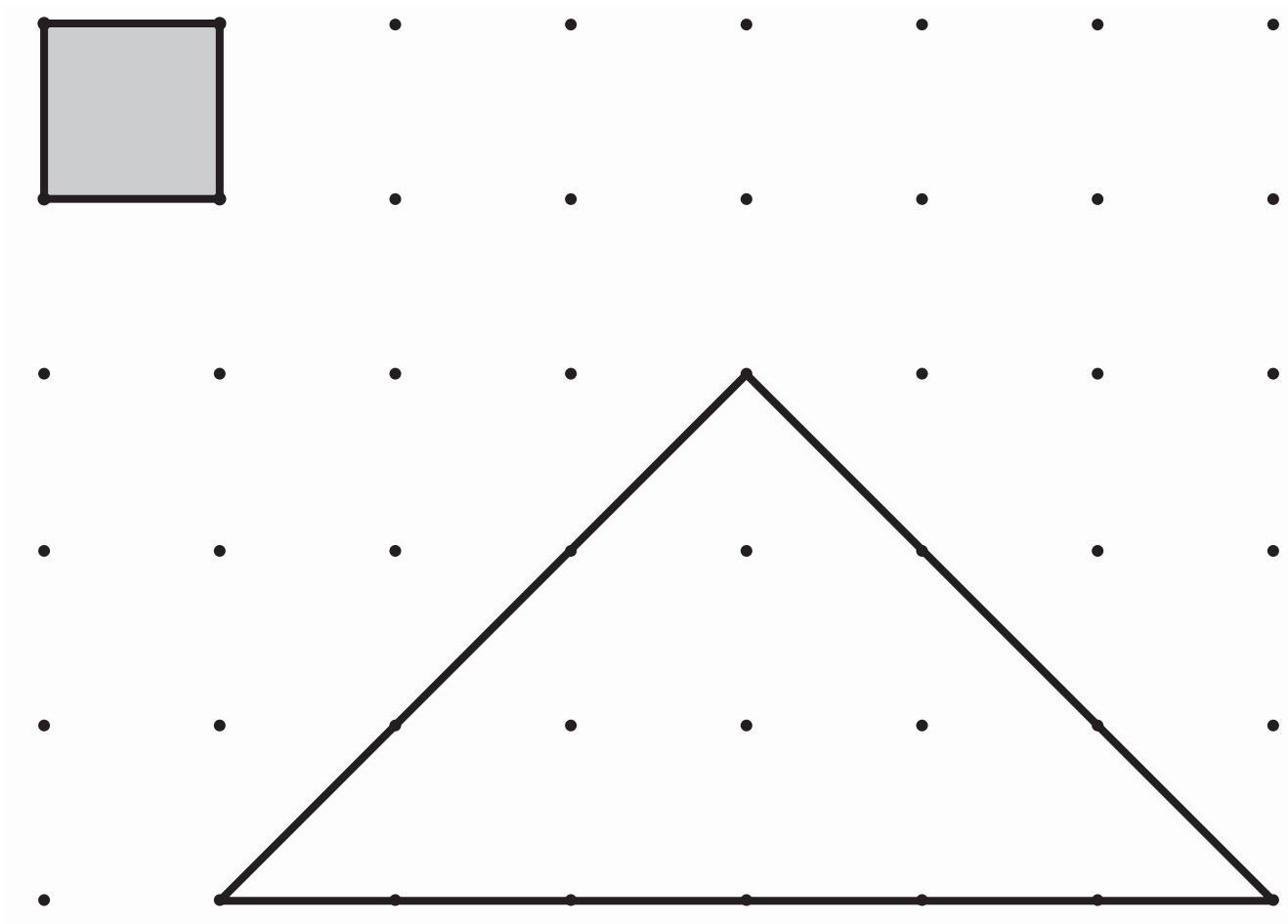


Name _____

Date _____

CBA Area: Student Sheet 13: Dealing with Fractional Units of Area, Part 2

How many of the gray unit-squares does it take to cover the inside of the triangle exactly?

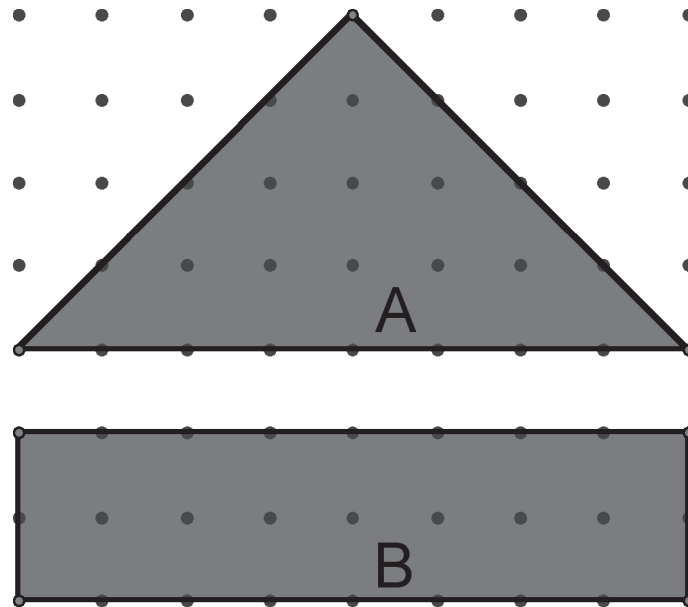


Name _____

Date _____

CBA Area: Student Sheet 14: Dealing with Fractional Units of Area, Part 3

Which carpet covers more of the floor, or do they cover the same amount? Explain how you found your answer.

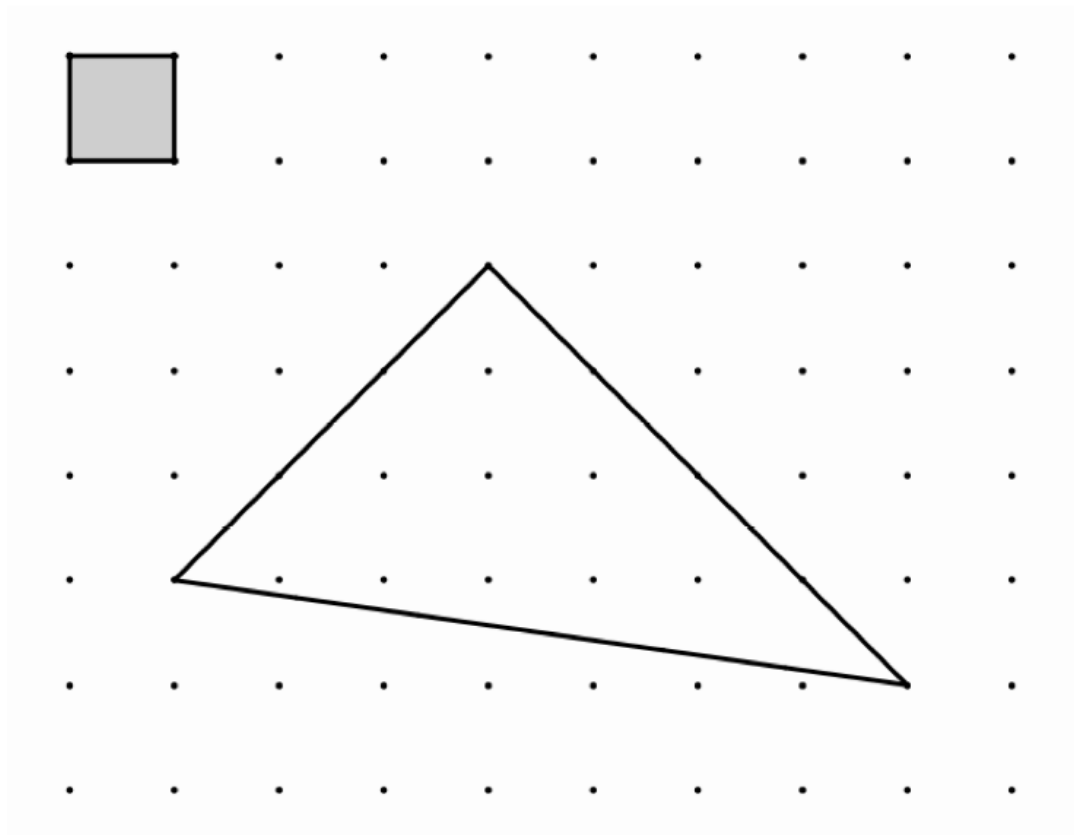


Name _____

Date _____

CBA Area: Student Sheet 15: Dealing with Fractional Units of Area, Part 4

How many of the gray unit-squares does it take to cover the inside of the triangle exactly?



Name _____

Date _____

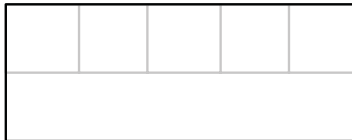
CBA Area: Student Sheet 16

This is a square centimeter. 

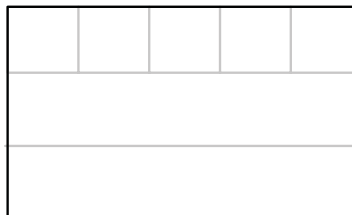
How many square centimeters does it take to cover the black rectangle below?



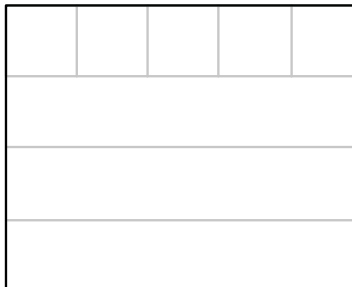
How many square centimeters does it take to cover the black rectangle below? Draw the squares.



How many square centimeters does it take to cover the black rectangle below? Draw the squares.



How many square centimeters does it take to cover the black rectangle below? Draw the squares.

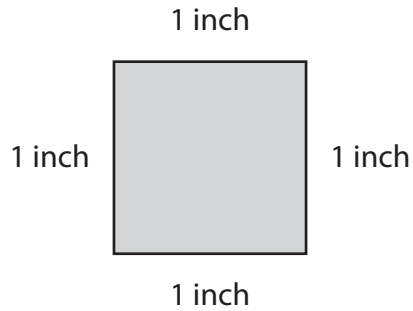


Name _____

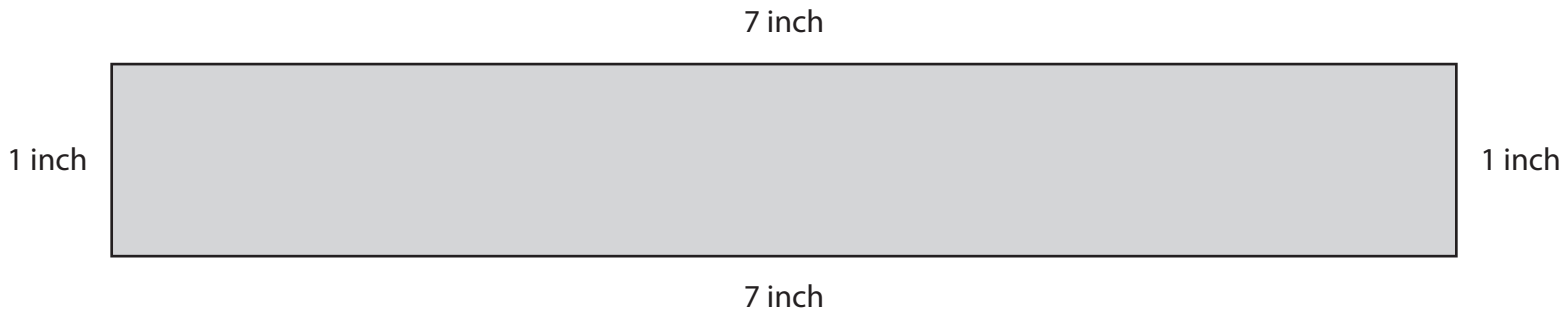
Date _____

CBA Area: Student Sheet 17

This is a square inch.



1. How many square inches does it take to cover the rectangle below? Check your answer with plastic squares.



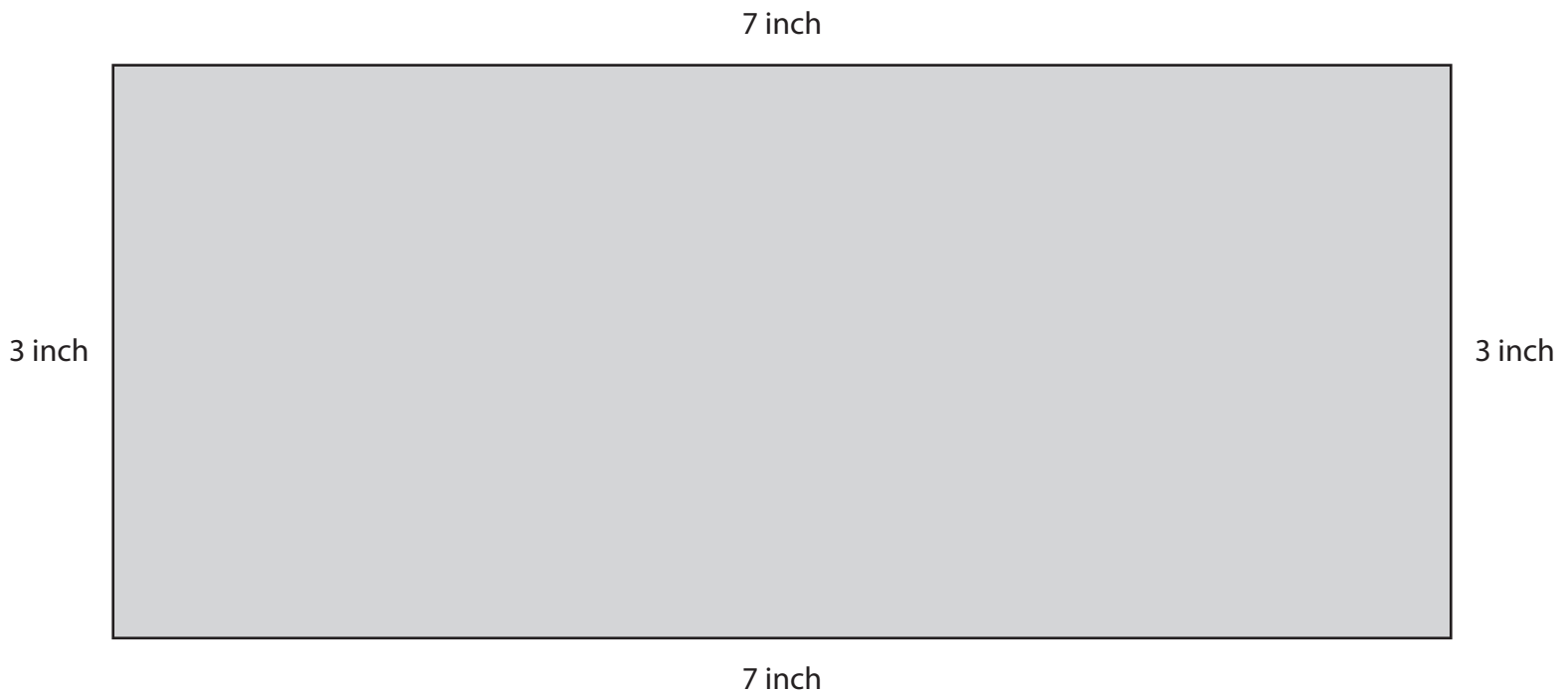
2. How many rows of square inches like in problem 1 does it take to cover the rectangle below?

Name _____

Date _____

CBA Area: Student Sheet 17 (*Continued*)

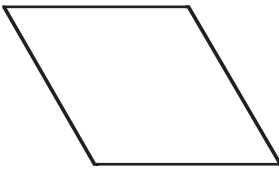
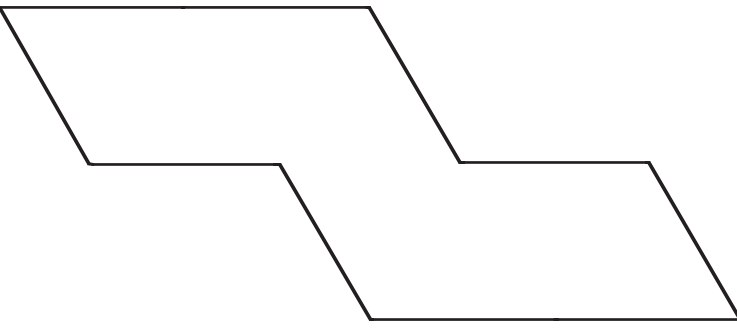
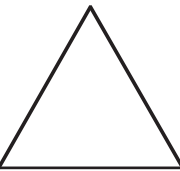
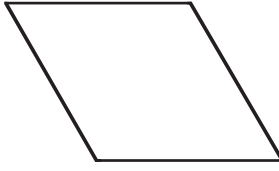
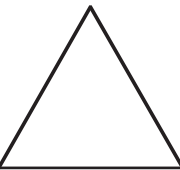
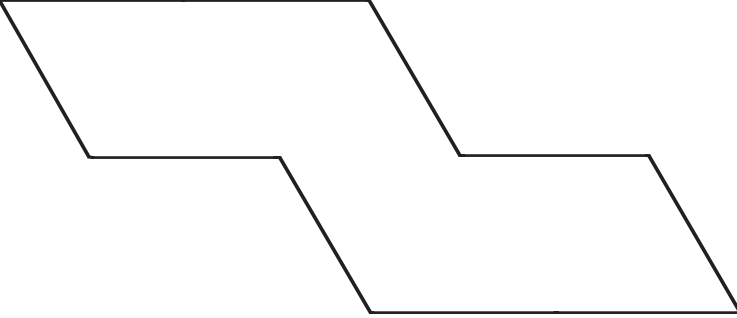
3. How many square inches does it take to cover the rectangle below? Check your answer with plastic squares.



Name _____

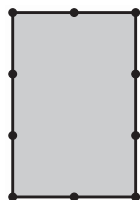
Date _____

CBA Area: Student Sheet 18

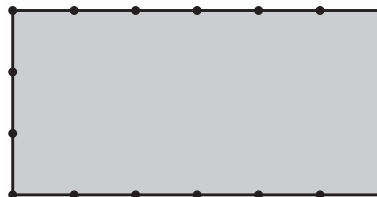
How many blocks shaped like this	does it take to cover this shape? Predict, then check with blocks.
	 Prediction _____ Check _____
How many blocks shaped like this	does it take to cover this shape? Predict, then check with blocks.
	 Prediction _____ Check _____
How many blocks shaped like this	does it take to cover this shape? Predict, then check with blocks.
	 Prediction _____ Check _____

CBA Area: Student Sheet 19

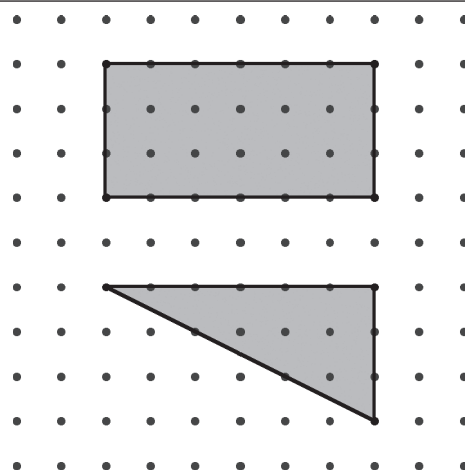
1. It takes 24 of one kind of sticker to cover this shape. All stickers are the same size.



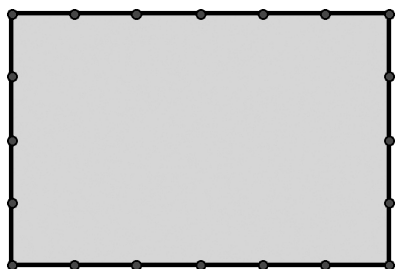
How many of the same kind of sticker does it take to cover this shape?



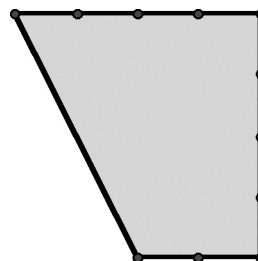
2. It takes 36 of one kind of sticker to cover the top shape.
How many of the same kind of sticker does it take to cover the bottom shape?
The stickers can be cut apart.
Explain your answer.



3. It takes 6 of one kind of sticker to cover this shape.



How many of the same kind of sticker does it take to cover this shape? The stickers can be cut apart.

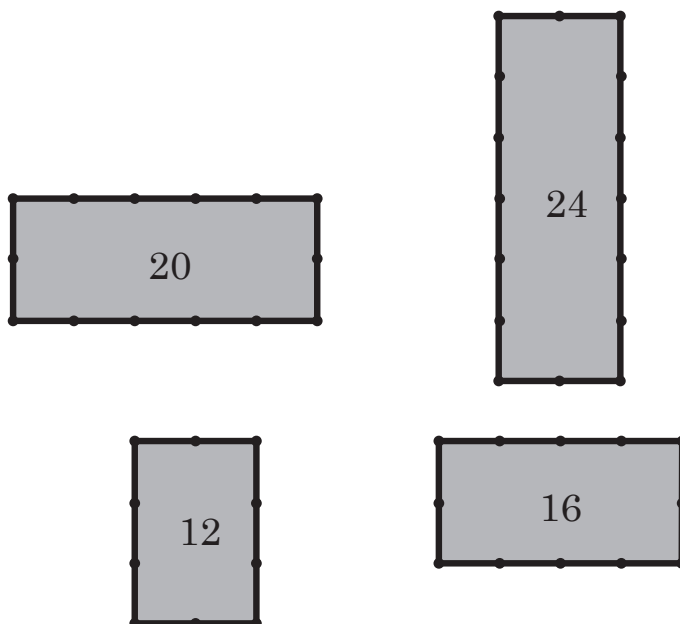


Name _____

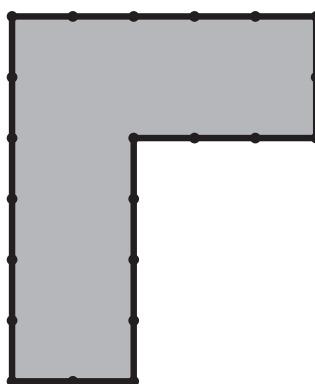
Date _____

CBA Area: Student Sheet 20

1. The number of one kind of sticker it takes to cover each shape is shown.



How many of the same kind of sticker does it take to cover this shape? Explain your answer.

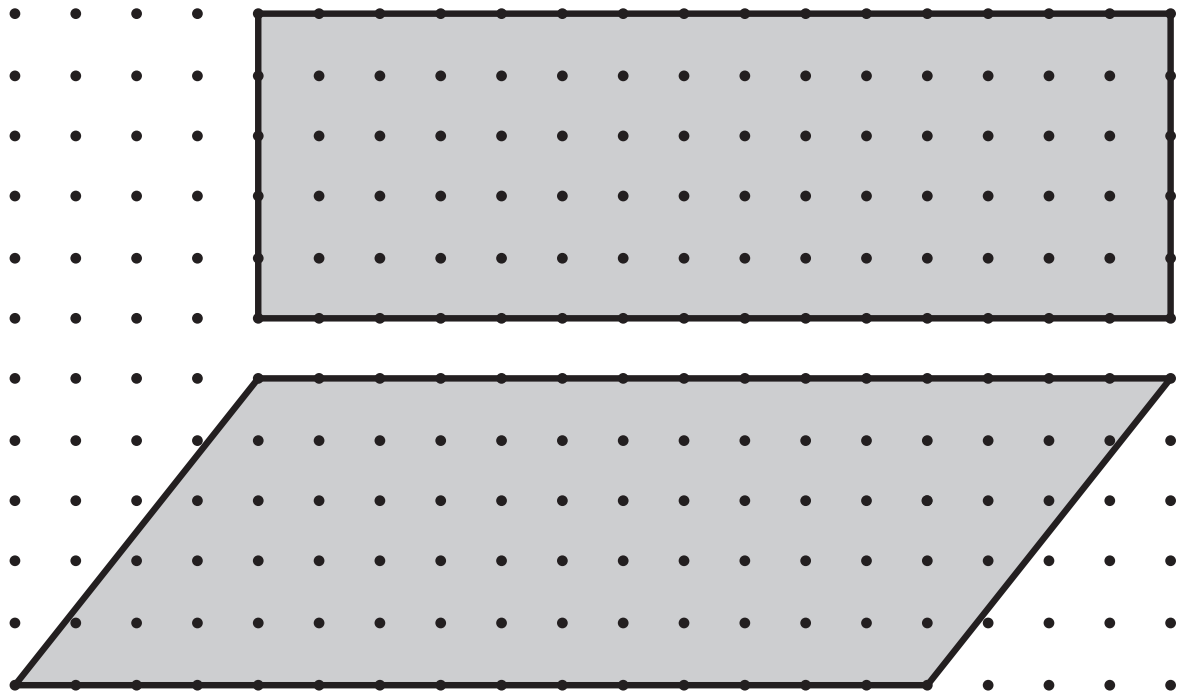


Name _____

Date _____

CBA Area: Student Sheet 20 (*Continued*)

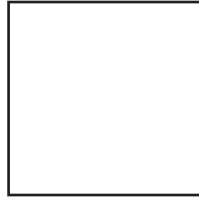
2. The top shape contains 100 stickers. How many of the same type of sticker does the bottom shape contain? Explain your answer.



Name _____

Date _____

CBA Area: Student Sheet 21



How many square tiles like this are needed to cover the rectangle on the next page?

It takes 5 squares to go across the top and 7 squares to go down each side.

Predict without drawing _____ Check with square tiles _____

Name _____

Date _____

CBA Area: Student Sheet 21 (*Continued*)

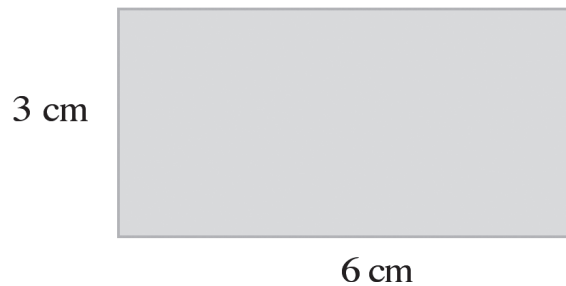


Name _____

Date _____

CBA Area: Student Sheet 22

1. How many square centimeters does it take to completely cover the rectangle? Can you figure this out without drawing squares? Explain how you found your answer. How can you prove your answer is correct?

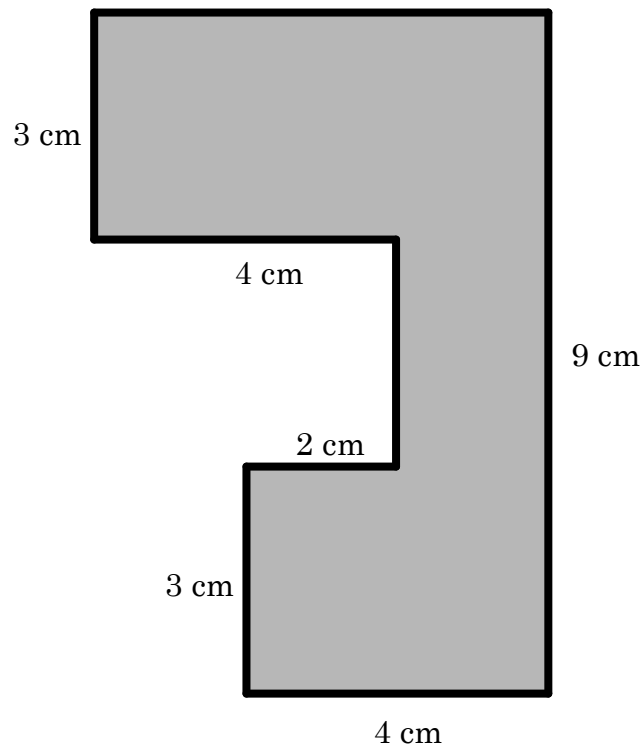


Name _____

Date _____

CBA Area: Student Sheet 22 (*Continued*)

2. Find the area. Explain your answer.

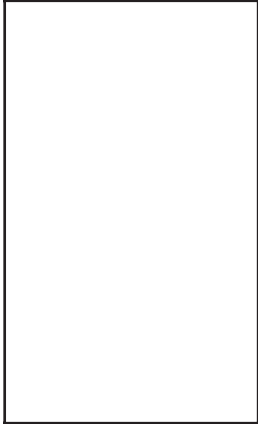
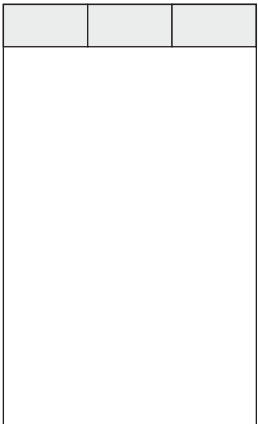
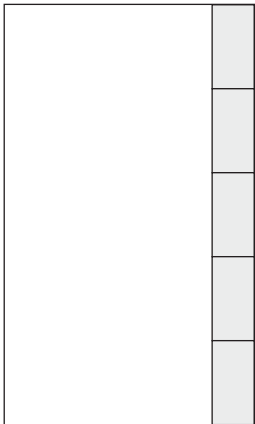


Name _____

Date _____

CBA Area: Student Sheet 23

Kathy has some tiles that each contain two identical squares. She wants to know how many of these **tiles** it takes to completely cover the rectangular floor below

1 square  tiles made from 2 squares  →   → 	floor 
Kathy knows that she can fit 3 tiles along the width of the floor. 	She knows that she can fit 5 tiles along the length of the floor. 

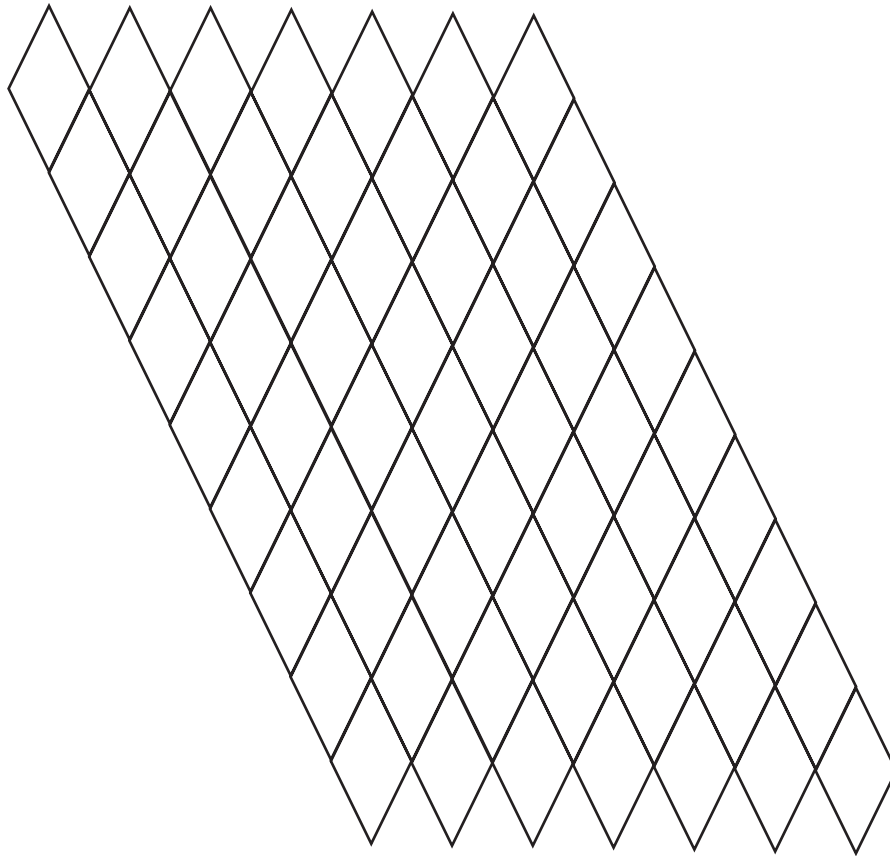
Challenge: How many tiles made of 5 squares does it take to cover this floor?

Name _____

Date _____

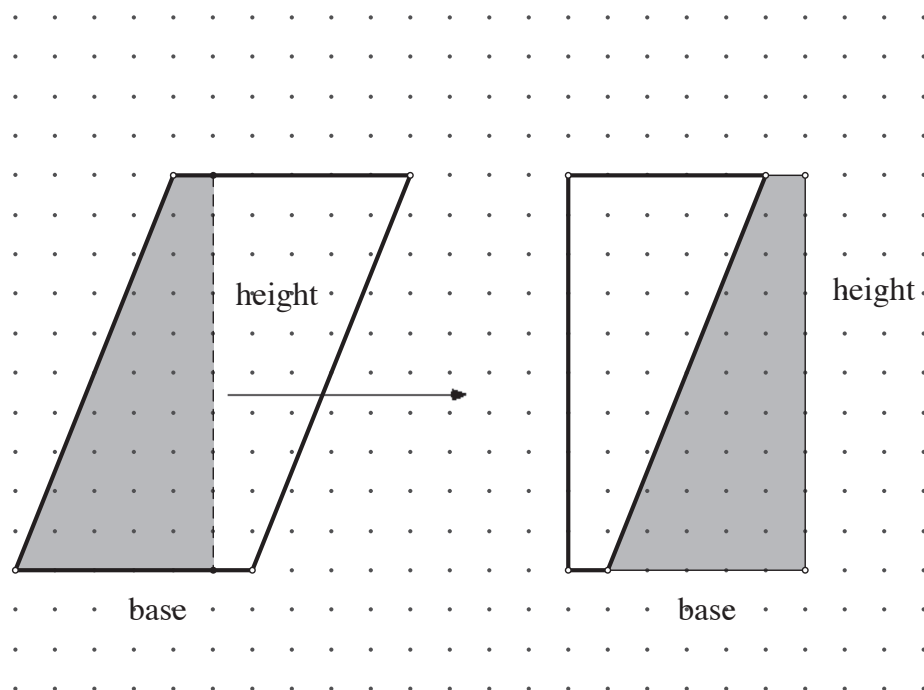
CBA Area: Student Sheet 24

Figure out how many small rhombuses there are in the figure below without counting all the rhombuses one-by-one.



CBA Area: Student Sheet 25**1. Figuring Out the Area Formula for a Parallelogram**

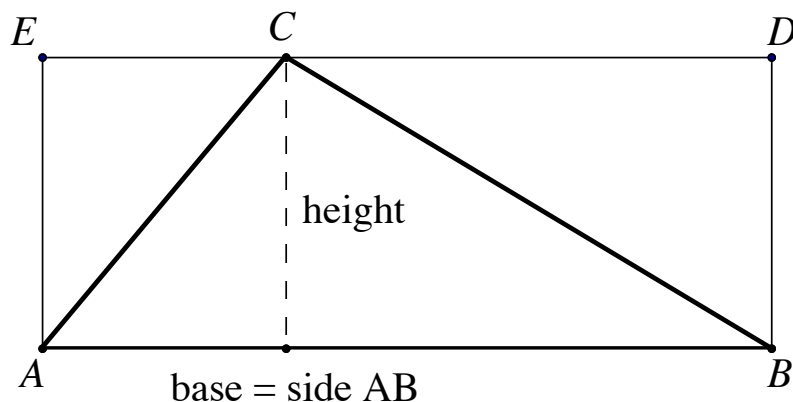
Use the diagram below to help you figure out the area formula for a parallelogram.



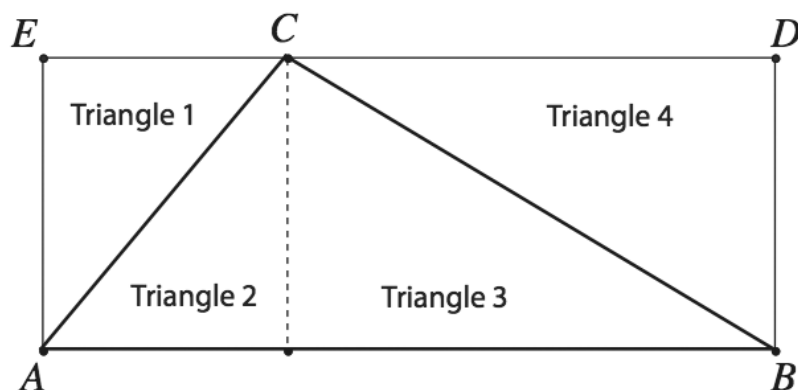
Describe your formula for the area of a parallelogram and explain how you would convince your classmates that your formula will work for every parallelogram. Be sure to explain exactly what you mean by height of a parallelogram.

CBA Area: Student Sheet 25 (Continued)**2. Figure Out the Area Formula for a Triangle**

Start with triangle ABC. Draw a rectangle, ABDE, around the triangle so that it has the same base and height as the triangle.



Use the diagram below to help you figure out the area formula for a triangle.



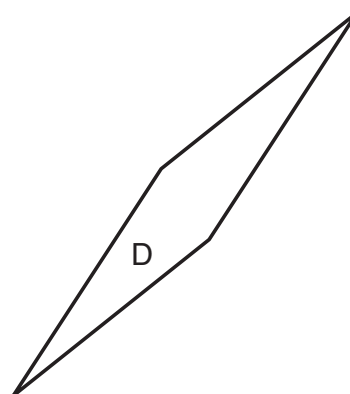
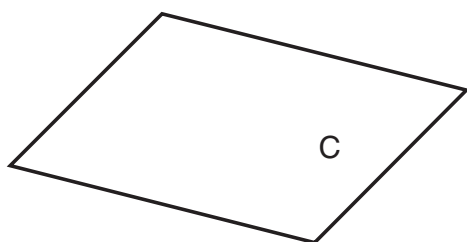
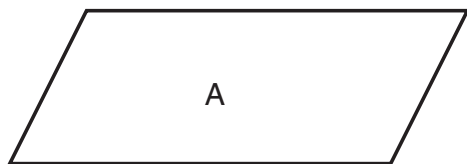
Describe your formula for the area of a triangle and explain how you would convince your classmates that your formula will work for every triangle.

Name _____

Date _____

CBA Area: Student Sheet 26

Label the base and height of each parallelogram. Then draw a rectangle that has the same base, height, and area.



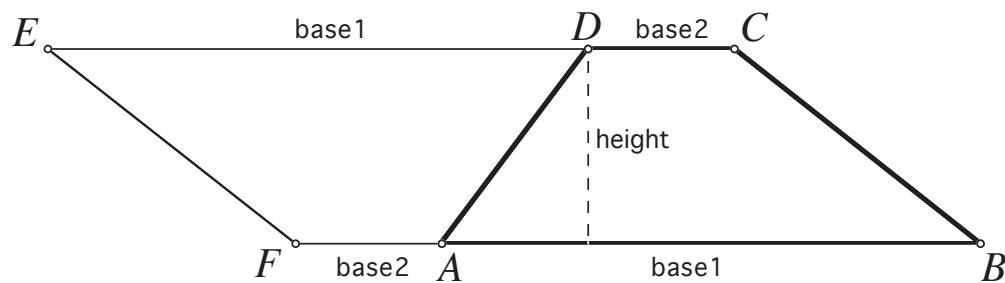
Name _____

Date _____

CBA Area: Student Sheet 27

Challenge: Figuring Out the Area Formula for a Trapezoid

Start with trapezoid ABCD. Place points E and F so that FABCDE is a parallelogram. (To do this, rotate ABCD 180° about the midpoint of AD—E and F will be the rotation images of B and C, respectively.) Use this diagram to help you figure out the area formula for a trapezoid.



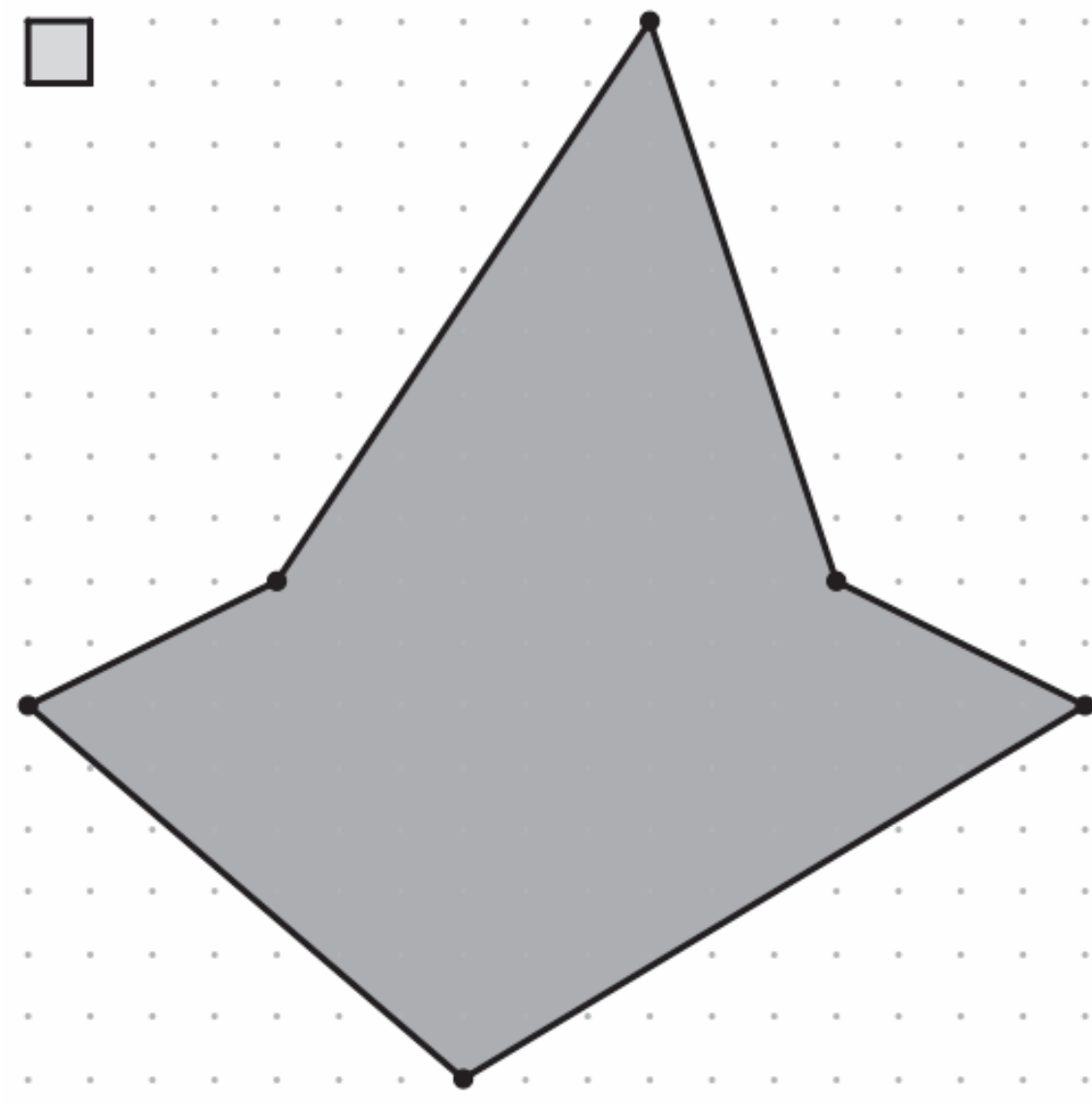
Describe your formula for the area of a trapezoid and explain how you would convince your classmates that your formula will work for every trapezoid.

Name _____

Date _____

CBA Area: Student Sheet 28

Assuming the shaded square is 1 square centimeter, find the area of the hexagon below.



Name _____

Date _____

CBA Area: Student Sheet 29

Find the surface area of a box that measures 3 by 4 by 5 cm.

Check your answer by making the pattern for the box on the centimeter graph paper on the next page.

