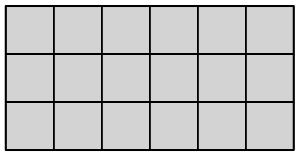
1ACE Exercise 6

6. Use this design for parts (a) and (b):



a. If possible, draw a figure with the **same area**, but with a **perimeter** of 20 units. If this is not possible, explain why.

HINT What is the area of the design above?

HINT What is the perimeter of the design above?

HINT Is it possible to draw a figure with the same area as the design above but a perimeter of 20 units? If so, draw the figure.

HINT If it is not possible, explain why.

b. If possible, draw a figure with the **same area**, but with a **perimeter** of 28 units. If this is not possible, explain why.

Name _____ Date _____ Class _____

2ACE Exercise 3

Investigation 2

Covering and Surrounding

3. For rectangles with an **area of 30** square meters, follow the steps below.

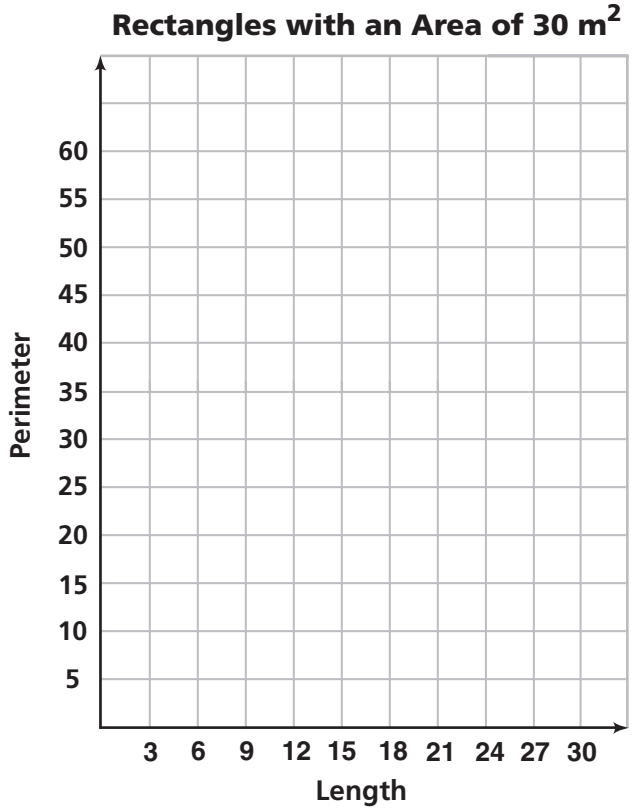
a. **Sketch** all the rectangles with the given area and whole-number side lengths. Record their length, width, area and perimeter in the table below.

Rectangles with an Area of 30 m^2

Rectangle	Length	Width	Area	Perimeter

2ACE Exercise 3 *(continued)*

b. Sketch a graph of the length and perimeter.



c. Describe how you can use the table and graph to find the rectangle with the **greatest perimeter**.

d. Describe how you can use the table and graph to find the rectangle with the **least perimeter**.

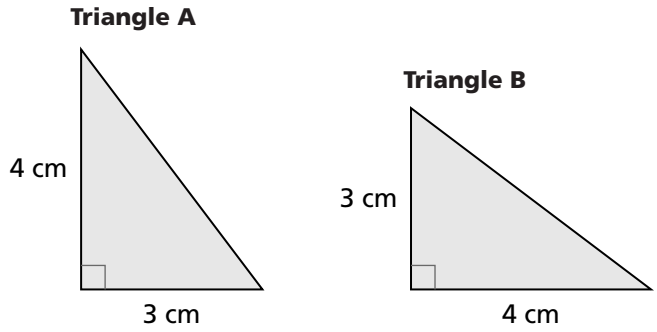
Name _____ Date _____ Class _____

3ACE Exercise 17

Investigation 3

Covering and Surrounding

17. Keisha says the right triangles below have different areas.



Do you agree with Keisha?

HINT What is the area of Triangle A?

HINT What is the area of Triangle B?

Why or why not?

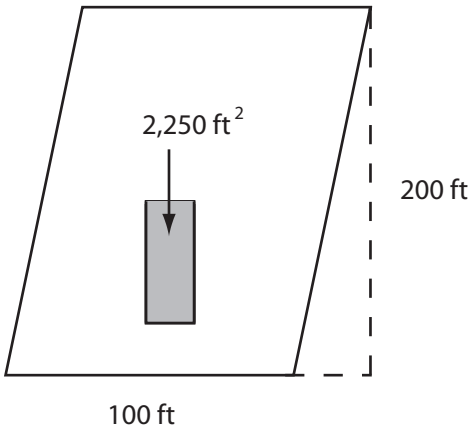
Name _____ Date _____ Class _____

4ACE Exercise 31

Investigation 2

Covering and Surrounding

31. The Lopez family bought a plot of land in the shape of a **parallelogram**. It is 100 feet wide (across the front) and 200 feet deep (the height). Their house covers **2,250 square feet** of land. How much land is left for grass?



HINT How do you find the area of a parallelogram?

Name _____ Date _____ Class _____

5ACE Exercise 15

Investigation 5

Covering and Surrounding

15. Best Crust Pizzeria sells three different sizes of pizza. The small size has a radius of 4 inches, the medium size has a radius of 5 inches, and the large size has a radius of 6 inches.

a. Fill in the table.

Best Crust Pizzeria

Pizza Size	Diameter (in.)	Radius (in.)	Circumference (in.)	Area (in.^{2})
Small		**4**		
Medium		**5**		
Large		**6**		

Explain how you found the area of the pizzas:

b. Jamar claims the area is <u>about</u> $0.75 \times (\text{diameter})^2$. Is he correct?

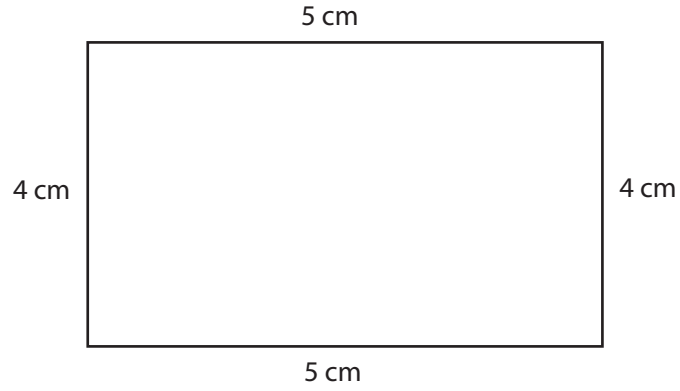
Explain.

Name _____ Date _____ Class _____

Check Up

Covering and Surrounding

2. Find the **area** and **perimeter** of this rectangle.



Area =

Explain how you found your answer for the area.

Perimeter =

Explain how you found your answer for the perimeter.