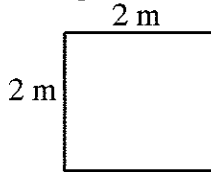


# Everyday Mathematics

## Grade 4 Unit 8

Name: \_\_\_\_\_

1. Find the perimeter of each polygon.

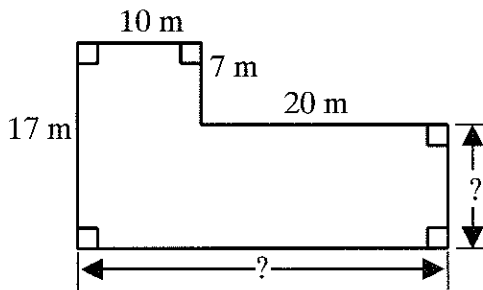


Number model: \_\_\_\_\_

Perimeter = \_\_\_\_\_ m

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2. Find the perimeter of the figure.

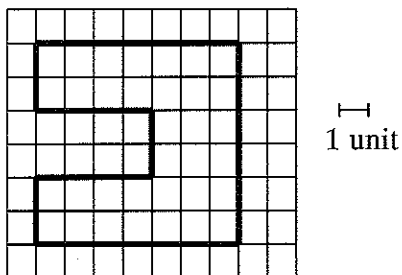


Number model: \_\_\_\_\_

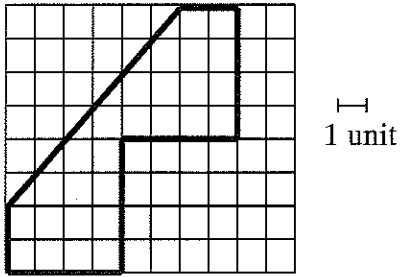
Perimeter = \_\_\_\_\_ m

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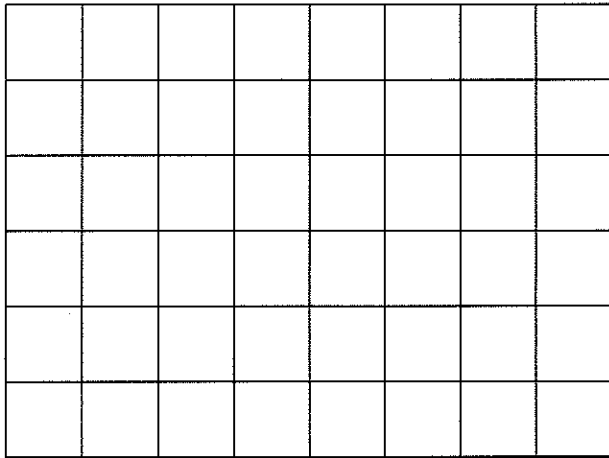
3. What is the area of the polygon?



4. What is the area of the polygon?

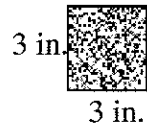


5. Draw a rectangle with an area of  $9 \text{ cm}^2$  and a perimeter of 12 cm.



6. Mrs. Lopez wants to tile her dining room floor. The room is 12 feet wide and 25 feet long.

- How many 1-square-foot tiles does she need to cover the floor?
- Suppose Mrs. Lopez chooses tiles that are 3 inches on each side. How many 3-inch tiles would she need in order to cover her dining room floor? Explain how you got your answer.



7. Add or subtract.

a.  $\underline{\hspace{2cm}} = \frac{2}{5} + \frac{3}{5}$

b.  $\underline{\hspace{2cm}} = \frac{2}{3} + \frac{2}{3}$

c.  $\frac{3}{3} - \frac{1}{3} = \underline{\hspace{2cm}}$

d.  $\frac{2}{5} - \frac{1}{5} = \underline{\hspace{2cm}}$

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8. Add or subtract.

a.  $\frac{1}{16} + \frac{1}{3} = \underline{\hspace{2cm}}$

b.  $\underline{\hspace{2cm}} = 1\frac{1}{4} + \frac{14}{15}$

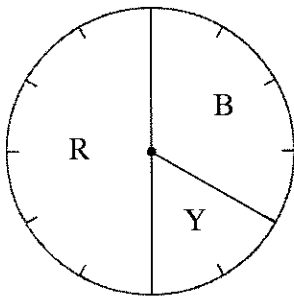
c.  $1\frac{35}{36} - \frac{1}{5} = \underline{\hspace{2cm}}$

d.  $\underline{\hspace{2cm}} = \frac{5}{6} - \frac{4}{5}$

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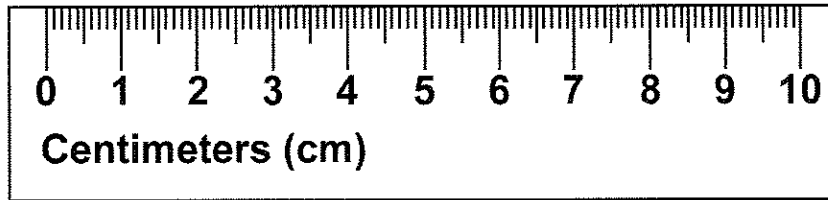
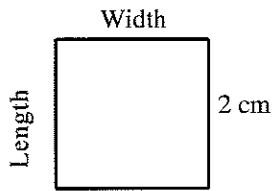
9. If you spin the spinner 600 times, how many times would you expect it to land:

- a. on R?
- b. on B?
- c. on Y?



10. A bag contains 4 blue blocks, 5 purple blocks, 4 green blocks, and 5 yellow blocks. You put your hand in the bag and pull out a block. About what fraction of the time would you expect to get a yellow block?

11. Complete the following measures for the rectangle below.  
Formula for the area of a rectangle:  $\text{Area} = \text{base} \times \text{height}$ .



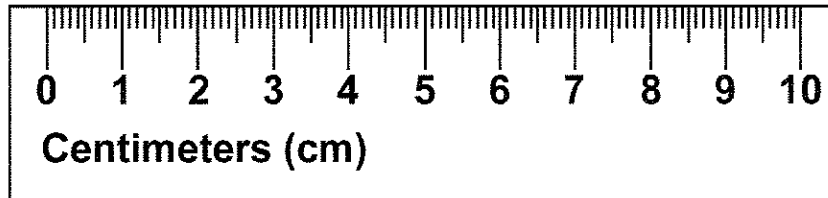
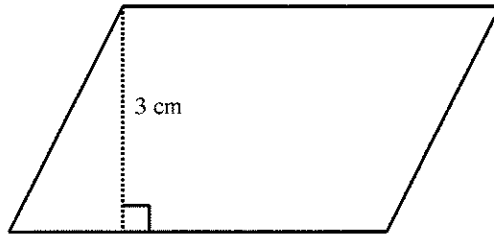
width = \_\_\_\_\_ cm

length = \_\_\_\_\_ cm

perimeter = \_\_\_\_\_ cm

area = \_\_\_\_\_  $\text{cm}^2$

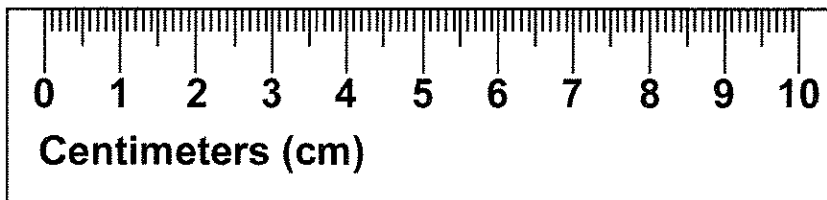
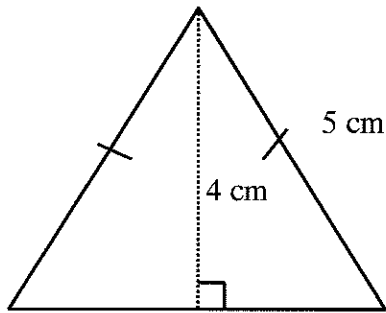
12. Complete the following measures for the parallelogram below.  
Formula for the area of a parallelogram:  $\text{Area} = \text{base} \times \text{height}$ .



base = \_\_\_\_\_ cm  
height = \_\_\_\_\_ cm  
perimeter = \_\_\_\_\_ cm  
area = \_\_\_\_\_  $\text{cm}^2$

13. Complete the following measures for the triangle below.

Formula for the area of a triangle:  $\text{Area} = \frac{1}{2} \times (\text{base} \times \text{height})$ .



base = \_\_\_\_\_ cm

height = \_\_\_\_\_ cm

perimeter = \_\_\_\_\_ cm

area = \_\_\_\_\_  $\text{cm}^2$

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14. Scale: 1 cm = 5 meters  
Dimensions of rectangle: 15 meters by 30 meters.  
Make a scale drawing of this rectangle.

Number Model:  $2(2 + 2) = 8$  m

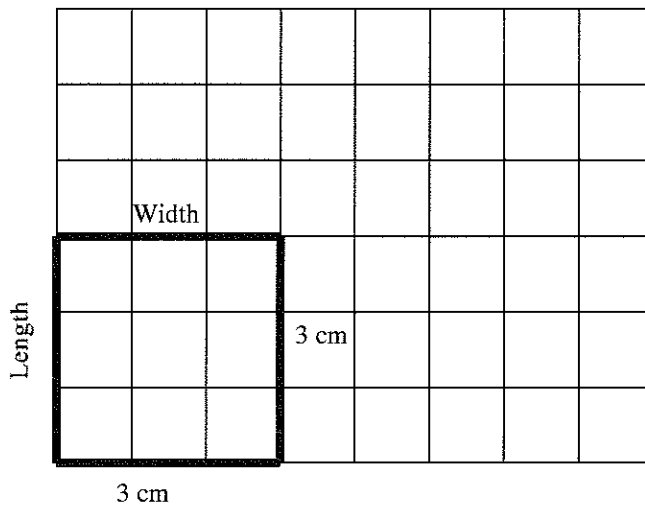
[1] Perimeter = 8 m

Number Model:  $17 + 10 + 7 + 20 + 10 + 30 = 94$

[2] Perimeter = 94 m

[3] Area = 34 square units

[4] Area = 30 square units



[5] 3 cm

a. Answer: 300 tiles

b. Answer: 4,800 tiles; It takes sixteen 3-inch tiles to cover one 12-inch tile, so she

[6] would need  $16 * 300$  tiles = 4,800 tiles.

a. 1

b.  $\frac{4}{3}$

c.  $\frac{2}{3}$

d.  $\frac{1}{5}$

[7]

a.  $\frac{19}{48}$

b.  $2\frac{11}{60}$

c.  $1\frac{139}{180}$

[8] d.  $\frac{1}{30}$

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a. 300

b. 200

[9] c. 100

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[10]  $\frac{5}{18}$

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width = 2 cm

length = 2 cm

perimeter = 8 cm

[11] area = 4 cm<sup>2</sup>

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base = 5 cm

height = 3 cm

perimeter = 16.71 cm

[12] area = 15 cm<sup>2</sup>

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base = 5 cm

height = 4 cm

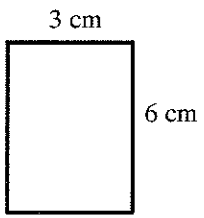
perimeter = 15 cm

[13] area = 10 cm<sup>2</sup>

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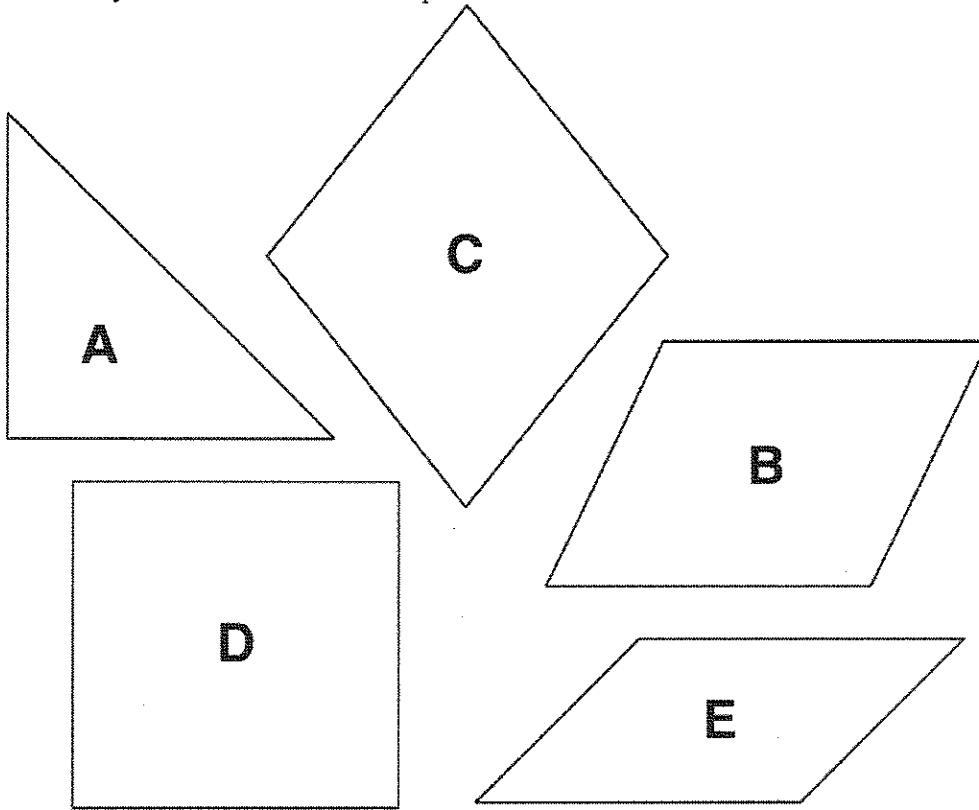


[14]



## 1. Comparing Areas

Carefully cut out each of the shapes below.



- Arrange shapes A–D in order of their area. (You may not measure with a ruler.) List the letters of the shapes from largest to smallest. If some shapes have the same area, write the letters next to each other and circle them.
- Explain the steps you followed to figure out the order of each of the shapes. You may draw pictures to illustrate your steps.

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**Try This**

- Compare shapes A and E. Tell which has the larger area. Explain how you compared the shapes.

Sample answers: a. A, B, C, D (there should be a circle around C and D). A is the smallest, C and D are the largest.

b. I could see that A was half of D when I put them on top of each other. C is the same size as D because you can cut C apart and move the pieces of it to make it look like D. No matter how you move the pieces of B, it cannot cover all of D. No matter how you move the pieces of A, it cannot cover B. So B goes in between A and D.

c. A and E have the same area. I put A on top of E and moved pieces of A until it looked like

[1] E.

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