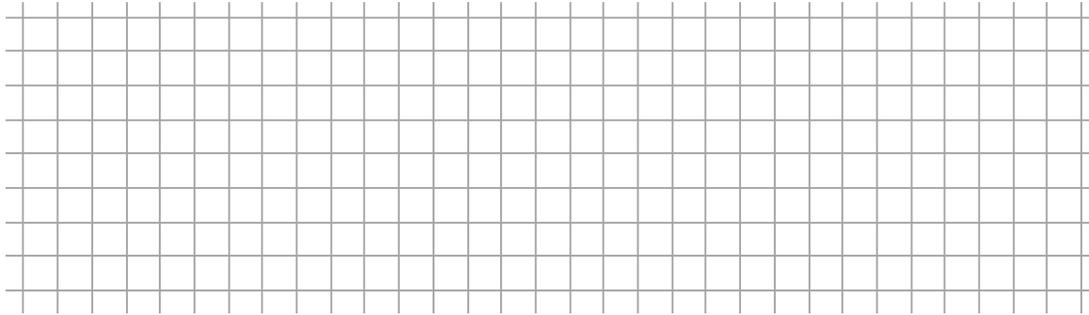


Area - Perimeter - Volume

1. Draw three different rectangles that have an area of 20 square units. Find the perimeters of your rectangles.



Which rectangle had the smallest perimeter?

Can you draw one with smaller perimeter yet (but with the same area)?

- 2 a. Draw a square with a perimeter of 4 inches. What is its area? b. Draw a square with an area of 9 sq. cm. What is its perimeter?

3. Which one fits each situation, perimeter, area, or volume, if you need to find out . . .

a. how much fence is needed to go around a yard?

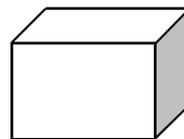
b. how much water is in a bottle?

c. what size carpet will cover the floor?

4. A farmer wants to build a sheep yard that is 120 square feet in area. Suggest three different rectangular shapes for him. Also calculate how much fence he needs for each yard. Which rectangular shape of yours uses the least amount of fence?

5. This aquarium's dimensions are 2 ft x 1.5 ft x 1.5 ft.

How many cubic inches of water would fit in it?



6. Another aquarium's dimensions are 4 ft x 2 ft x 2 ft. Jenny wants to divide it into two parts with a glass wall so that the first part has a volume between 10,000 and 12,000 cubic inches. Help Jenny: where should she place the glass divider?