

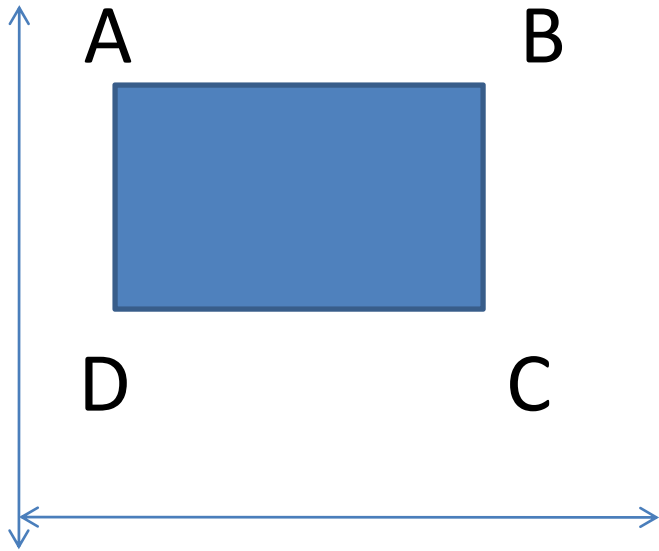
Page 181, The Coordinate Plane

1. We will explore plotting points and working with figures in a plane.
2. A plane is a flat surface that extends forever in all directions.
3. Coordinates are two numbers used to locate points in a plane.
4. Two Perpendicular number line are called axes. Each number line is called an axis. The point where the axes meet is called the origin.
5. A point in a plane is represented by 2 coordinates, called an ordered pair.
6. An ordered pair is written inside parentheses, and a common separates the coordnates.
7. The ordered pair that represents the origin is $(0,0)$
8. The horizontal axis is called the x-axis. The vertical axis is called the y-axis

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9. In an ordered pair, the first coordinate is called the x-coordinate, and the second coordinate is called the y-coordinate.
10. the distance between 2 points is the length of the segment between them.
11. The length of the horizontal segment between the points $(2,4)$ and $(8,4)$ is $8-2$ or 6.
12. To find the length of the vertical segment between the points $(6,9)$ and $(6,5)$, take the difference between the y-coordinates of the segment's endpoints, or $9-5 = 4$.

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(see Figure ABCD, p 182)

#13. a. The ordered pair

for each point is: A(2,9);

B(8,9); C(8,4); D(2,4)

b. The length of each

side: $AB = 8 - 2 = 6$, $BC = 9 - 4 = 5$, $CD = 8 - 2 = 6$,
 $DA = 9 - 4 = 5$

c. Perimeter of the rectangle is $2 \times 5 + 2 \times 6 = 22$

d. Area of the rectangle is $5 \times 6 = 30$

Homework Due May 1

Math III

Pages 183-184 (#1-5); page 189 (#1-2), page 191 (#1-2)

Math Olympiad Chapter 7, making a table, #6-10, #16-20

Math IV

Pages 183-184 (#1-5); page 189 (#1-2), page 191 (#1-2)

Math Olympiad Chapter 7, making a table, #1-20