Lesson 17: Distance on the Coordinate Plane
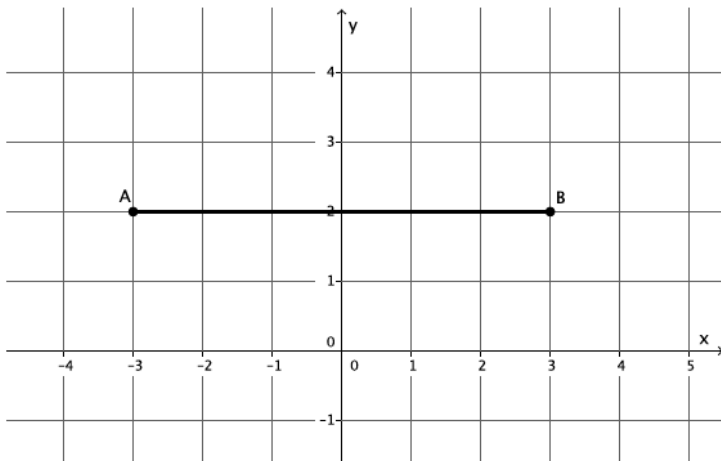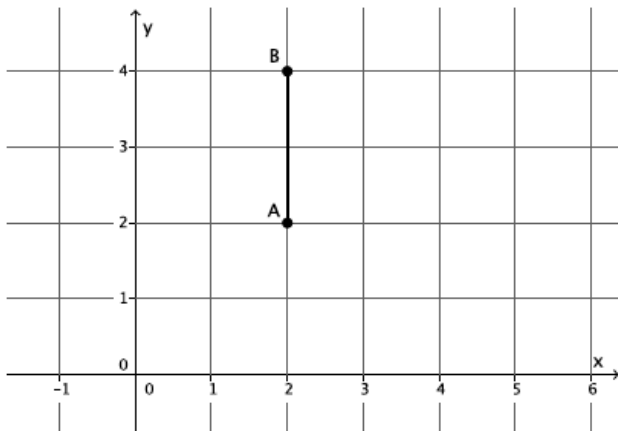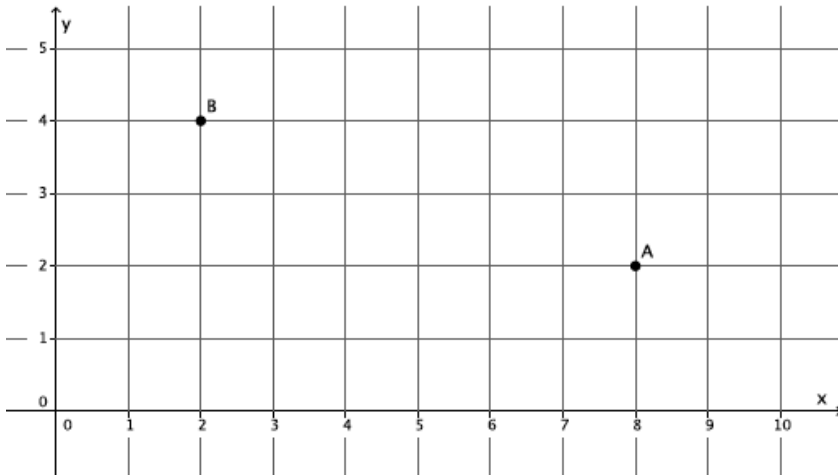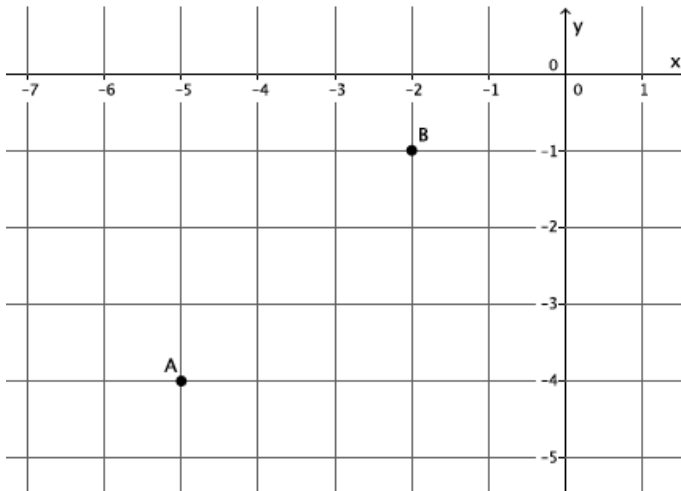
Example 1

What is the distance between the two points A, B on the coordinate plane?

What is the distance between the two points A, B on the coordinate plane?

What is the distance between the two points A, B on the coordinate plane? Round your answer to the tenths place.
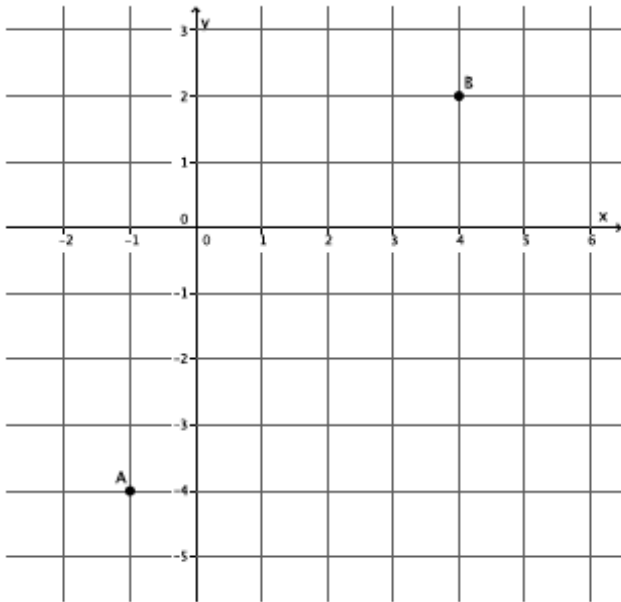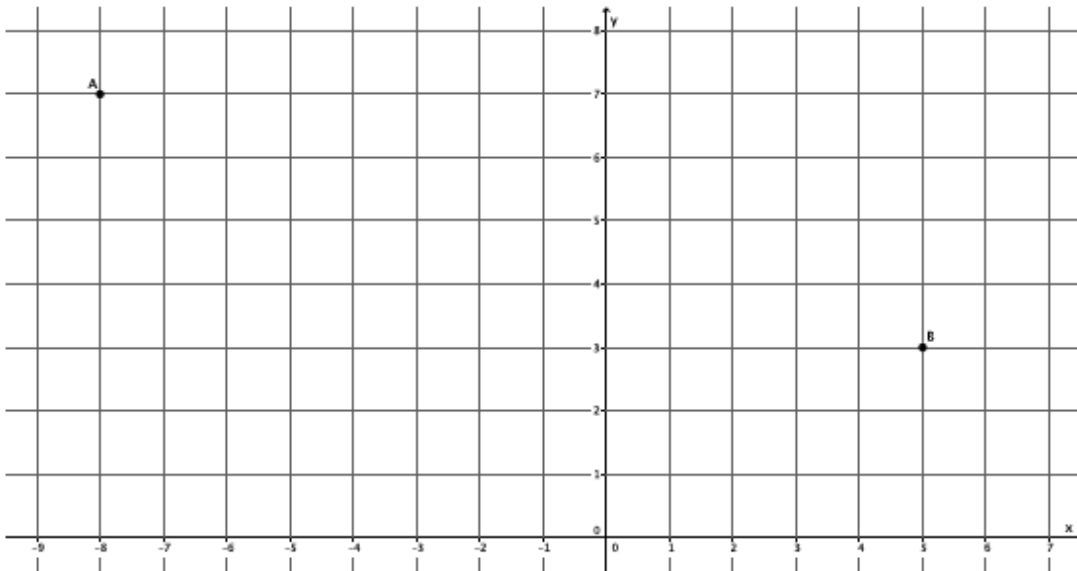

Example 2

Exercises 1–4

For each of the Exercises 1–4, determine the distance between points A and B on the coordinate plane. Round your answer to the tenths place.
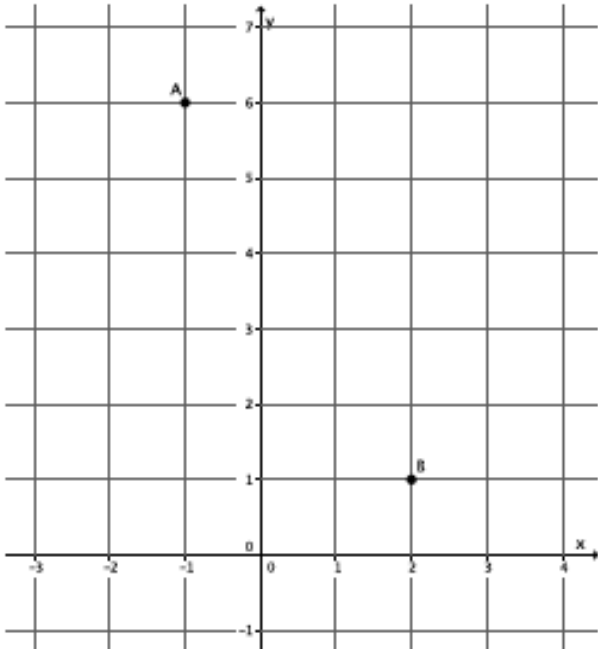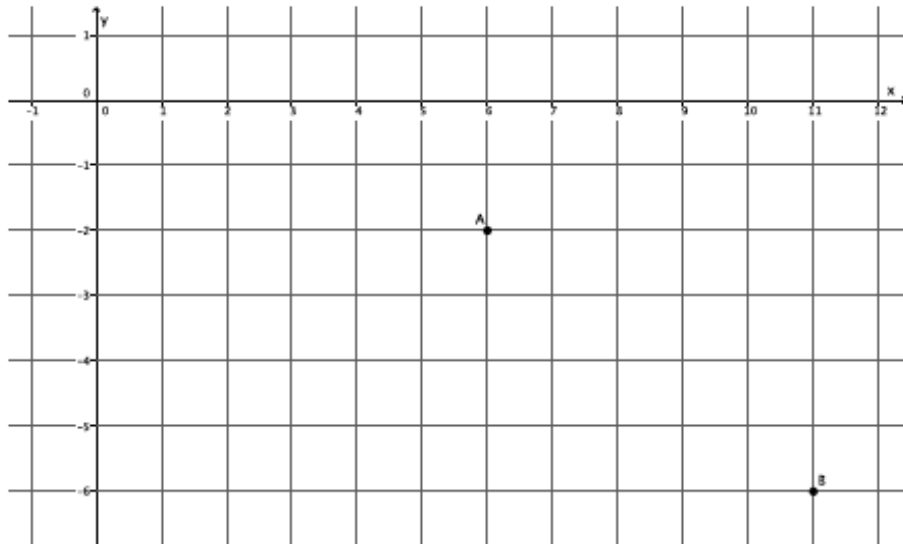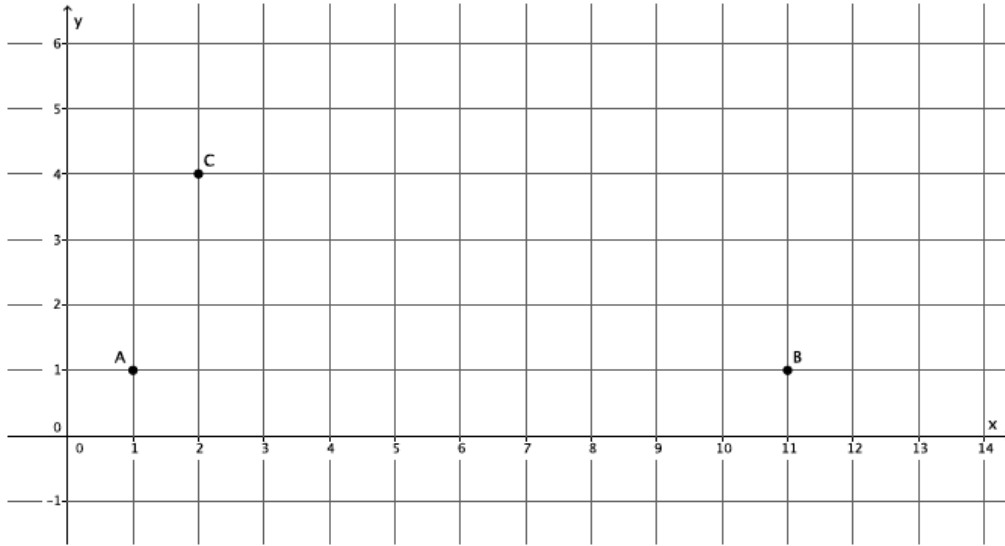
1.

2.

3.

4.

Example 3

Is the triangle formed by the points A, B, C a right triangle?

Lesson Summary

To determine the distance between two points on the coordinate plane, begin by connecting the two points. Then draw a vertical line through one of the points and a horizontal line through the other point. The intersection of the vertical and horizontal lines forms a right triangle to which the Pythagorean Theorem can be applied.

To verify if a triangle is a right triangle, use the converse of the Pythagorean Theorem.
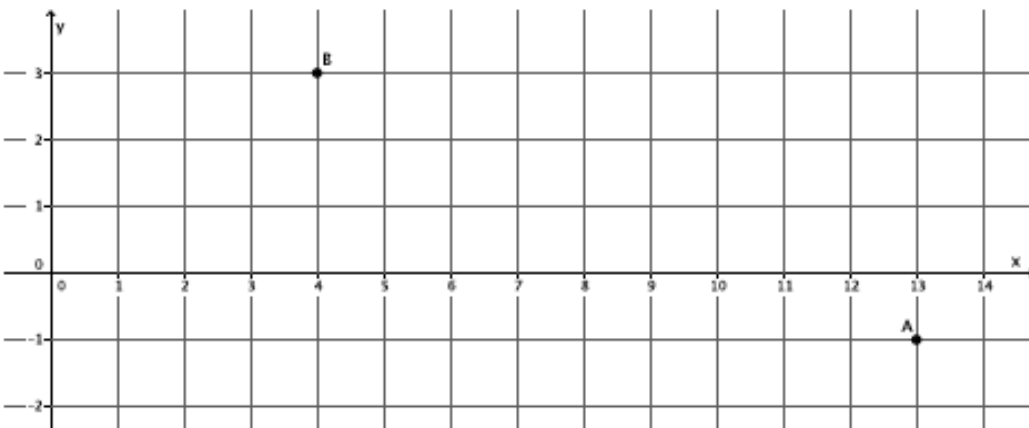
Problem Set

For each of the Problems 1–4 determine the distance between points A and B on the coordinate plane. Round your answer to the tenths place.
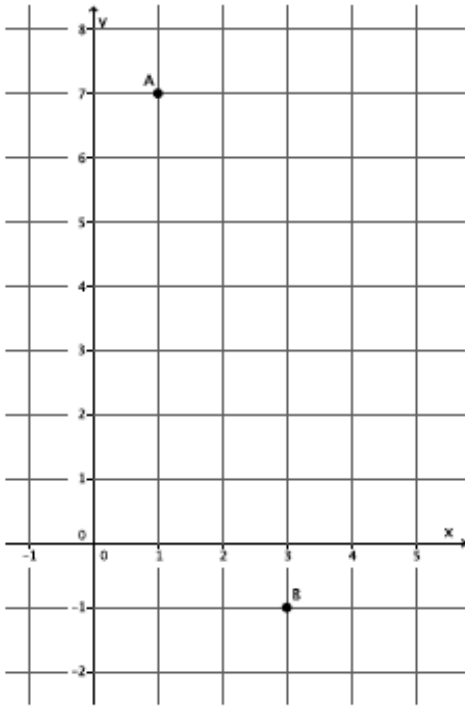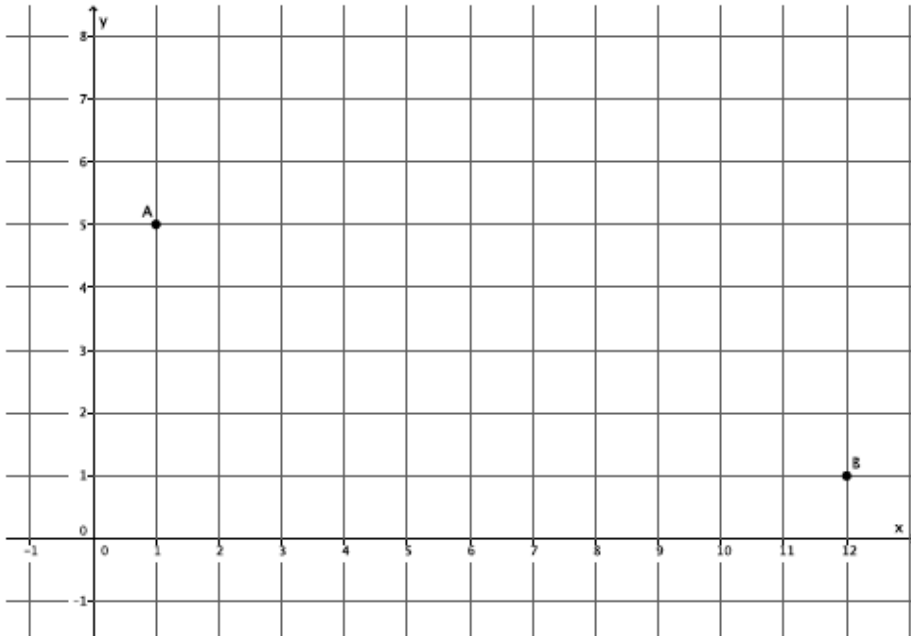
1.
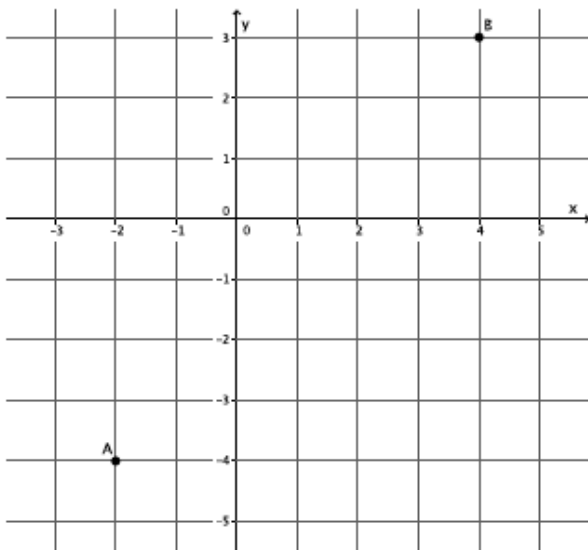
2.

3.

4.

5. Is the triangle formed by points A, B, C a right triangle?