## Pg. 21.1 - Rectangular Coordinates

## Ex 1:

Approximate the coordinates of the points.


## Ex 2:

Determine the quadrant(s) in which ( $\mathrm{x}, \mathrm{y}$ ) is located so that the condition(s) is (are) satisfied.
a) $x<0$ and $y<0$
b) $x>2$ and $y=3$

## Pythagorean Theorem:

## Ex 3:

Find the length of the hypotenuse of the triangle.


The relationship between the distance formula and Pythagorean Theorem is shown on page 4.

## Distance Formula:

Midpoint Formula:

## Ex 4:

Find the distance between the points, and find the midpoint of the line segment joining the points.
$(-7,-4),(2,8)$

## Ex 5:

Dimensions of a Container The width of a rectangle storage container is 1.25 times the height. The length of the container is 16 inches and the volume of the container is 2,000 cubic inches.
a) Draw a diagram that represents the problem. Label the height, width, and length accordingly.
b) Write $w$ in terms of $h$ and write an equation for the volume in terms of $h$.
c) Find the dimensions of the container.

Note: Geometry formula's on page 1

## Assignment 1.1

Pg. 9 Vocab \#'s 1-4 Problem Set \#'s 1-47 ODD, 51, 53, 63, 65, 67
Check Answers Pg. A77

