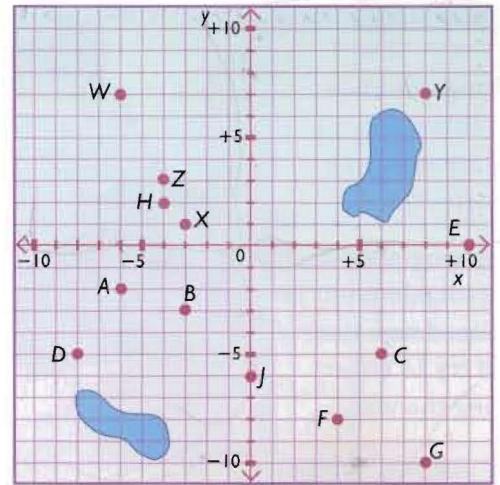


Understand and Apply

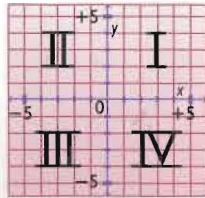


- What letter marks each point on the grid?
 - $(-6, -2)$
 - $(-3, -3)$
 - $(+6, -5)$
 - $(-8, -5)$
 - $(+10, 0)$
 - $(+4, -8)$
 - $(+8, -10)$
 - $(-4, +2)$
 - $(0, -6)$
- What letter names each point on the grid?
 - $(-6, 7)$
 - $(-3, 1)$
 - $(8, 7)$
 - $(-4, 3)$
- Which point in Problem 1 is closest to each of the points in Problem 2?

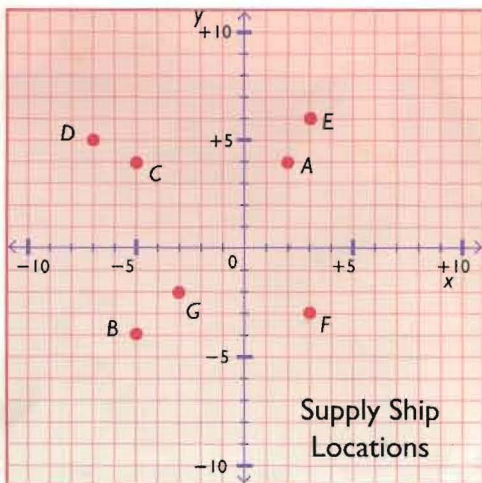


WE

4. A coordinate grid system is divided into four sections called **quadrants**. They are numbered as shown.



- Name the quadrant (first, second, ...) for each point in Problem 1.
 - Which points do not lie in any quadrant? Explain.
 - Describe in words the signs of the coordinates of points in each quadrant.
- Without plotting the points, name the quadrant in which each point is found.
 - $M(5, -10)$
 - $N(-6, -7)$
 - $P(1, 11)$
 - $Q(-10, 2)$
 - Write the coordinates that locate each supply ship.



- A storm is following along the path given by these coordinates.

WE

$H(+5, +4)$ $I(+3, +2)$ $J(+1, 0)$ $K(-1, -2)$

- Draw a coordinate grid system and plot the positions of the supply ships shown in Problem 1.
 - Plot the points on the storm's path.
 - Connect the points to see where the storm has travelled.
 - Predict two further coordinates in the path of the storm.
 - Which two supply ships are most in danger?
- Draw some straight-sided geometric shapes on a coordinate grid. Label the vertices with letters. By describing the positions of points on the grid, have your partner plot your shapes on another grid. Compare the results with the original shapes.

In Your Journal

Look up the words *origin* and *quadrant* in a dictionary. Describe how these definitions are related to their mathematical meanings.