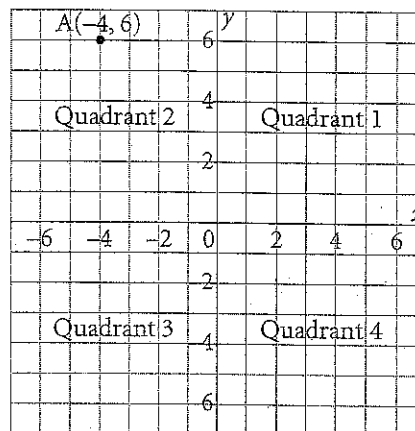


Quick Review

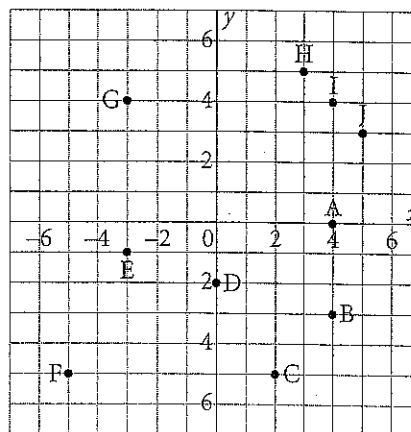
- A **coordinate grid** is formed when a horizontal number line and a vertical number line intersect at right angles at 0.
- The horizontal number line is the **x -axis**.
The vertical number line is the **y -axis**.
They meet at the **origin**.
- The axes divide the grid into 4 **quadrants** numbered 1, 2, 3, and 4 counterclockwise.
- Points on the axes do not belong to any quadrant.
- A point on a coordinate grid is located by an **ordered pair** of numbers.
The first number, the x -coordinate, tells how far left or right of the origin the point is.
The second number, the y -coordinate, tells how far up or down from the origin the point is. For example, $(-4, 6)$ is 4 units left of the origin and 6 units up.



Practice

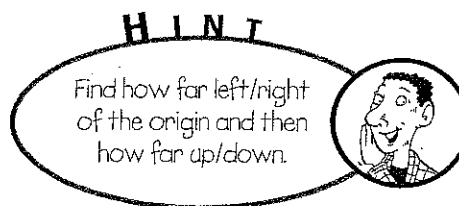
1. Use each letter once. Complete these descriptions for points in the diagram.

- a) Point _____ is 3 units right of and 5 units up from the origin.
- b) Point _____ is 5 units right of and 3 units up from the origin.
- c) Point _____ has x -coordinate 0.
- d) Point _____ has y -coordinate 0.
- e) Points _____ have the same x -coordinates.
- f) Points _____ and _____ have equal x - and y -coordinates.
- g) Points _____ and _____ are in Quadrant 4.



2. Use the diagram in question 1.
Write the coordinates of each point.

- a) A (4, _____) b) B (_____, -3)
c) C _____ d) D _____
e) E _____ f) F _____ g) G _____
h) H _____ i) I _____ j) J _____

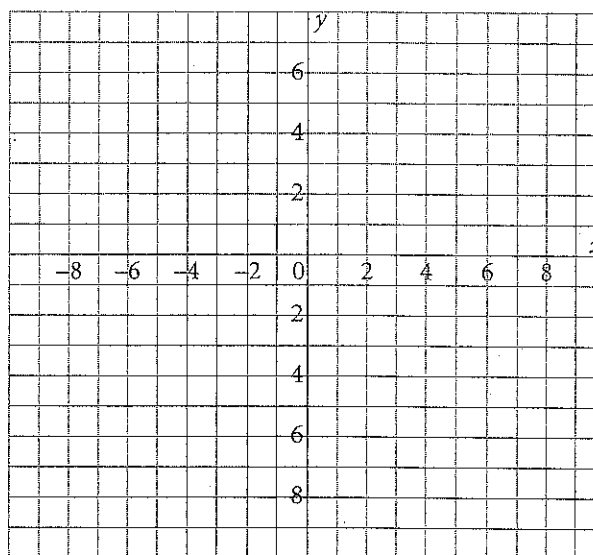


3. Plot these points on the grid.

(2, -9), (0, -5), (-4, -7), (-6, -10),
(-8, -10), (-9, -8), (-7, 0), (-5, 5),
(-6, 7), (-3, 6), (2, 3), (4, 0), (8, -4)

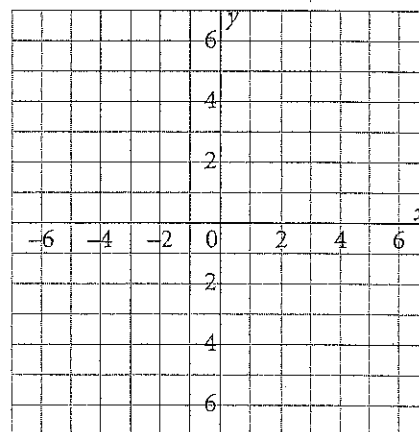
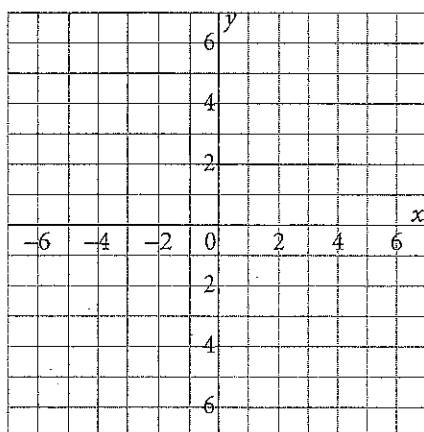
Join the points in the order listed.

Which animal's head did you draw?



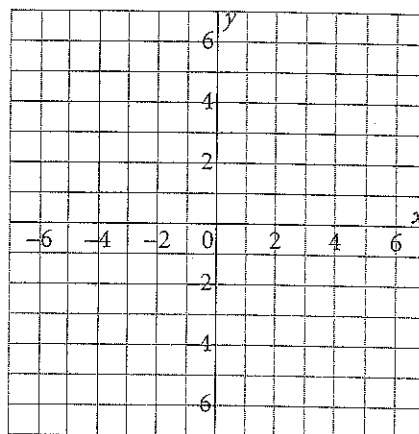
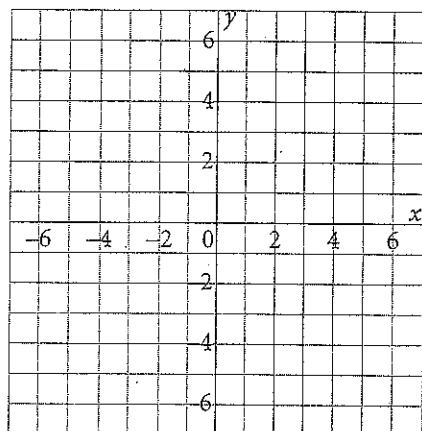
4. Graph each set of points. Join the points in order. Then join the last point to the first point.
Name the geometric shape you drew.

- a) (5, 3), (5, -3), (-5, -3), (-5, 3) b) (-4, 0), (2, 0), (5, 3), (-1, 3)



c) $(-3, 4), (2, 4), (4, -2), (-4, -2)$

d) $(5, 1), (-2, -2), (-5, 1), (-2, 4)$



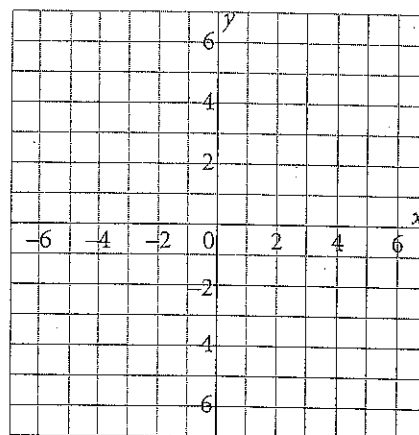
5. a) $A(-4, -2)$, $B(-4, 5)$, and $C(3, 5)$ are 3 vertices of square ABCD.

Graph these points on the grid.

- b) What are the coordinates of point D?

Graph this point on the grid.

Join the points to form square ABCD.



- c) Find the area and perimeter of square ABCD.

The side length of square ABCD is _____ units.

The area of square ABCD is _____ square units.

The perimeter of square ABCD is _____ units.