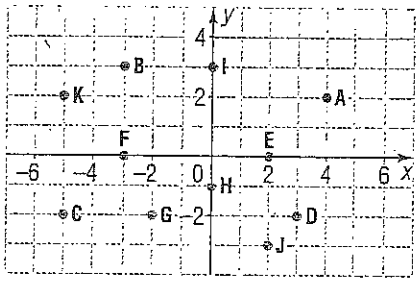
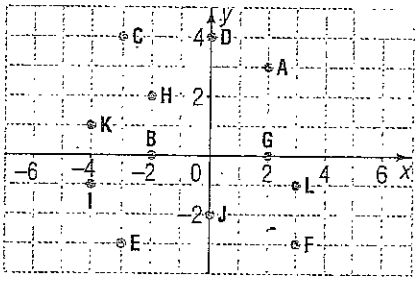
Practice

1. Write the coordinates for each point.



On the following grid, name the points given by these ordered pairs.

2. (2, 3) **3.** (–2, 2) **4.** (–3, –3)
5. (3, –3) **6.** (–4, –1) **7.** (–3, 4)
8. (2, 0) **9.** (0, 4) **10.** (–2, 0)
11. (0, –2) **12.** (–4, 1) **13.** (3, –1)



Problems and Applications

14. Plot the ordered pairs to make a word.
a) Join (–3, 0) to (–3, 1), (–3, 0) to (–5, 0), (–5, 2) to (–5, 0), (–5, 2) to (–3, 2), (–3, 1) to (–4, 1).
b) Join (–1, 2) to (1, 2), (–1, 2) to (–1, 0), (1, 1) to (1, 2), (1, 1) to (–1, 1), (1, 0) to (–1, 1).
c) Join (2, 2) to (2, 0).
d) Join (5, 1) to (4, 0), (5, 1) to (4, 2), (3, 0) to (3, 2), (3, 0) to (4, 0), (4, 2) to (3, 2).

Plot the points on a grid and join them in order. Identify each figure and find the area.

15. A(–3, 0), B(–3, 3), C(0, 3), D(0, 0)

16. E(–5, 5), F(–5, –5), G(1, –5), H(1, 5)

17. P(–2, –2), Q(–2, 2), R(2, 2), S(2, –2)

18. D(–4, 2), E(8, 2), F(8, –4), G(–4, –4)

19. a) Points A(1, 1), B(2, 4), and C(6, 4) are 3 vertices of a parallelogram. Plot the points on a grid.
b) Find three different coordinates for point D so that ABCD is a parallelogram.

20. An ant moves from point A on a grid along a straight path determined by the points A(–3, –5), B(–2, –4), and C(–1, –3). An anteater moves from point P on the same grid along a straight path determined by the points P(–2, 6), Q(–1, 5), and R(0, 4). They move at the same speed.
a) Plot the two paths on a grid.
b) What are the coordinates of the point where the paths cross?
c) Does the ant pass in front of the anteater or behind the anteater, or do they meet where their paths cross?
d) Write 3 different ant and anteater problems. In one, have them meeting at a point. In another, have the ant passing in front of the anteater. In another, have the ant passing behind the anteater. Have a classmate solve your problems.

NUMBER POWER

The expression shows one way of using four –5s and the order of operations to express the value 1.

$$-5-(-5)+\left(\frac{-5}{-5}\right)$$

Use four –5s and the order of operations to write expressions that equal each of these values.

a) 0 **b)** 2 **c)** 9
d) 3 **e)** 7 **f)** 5