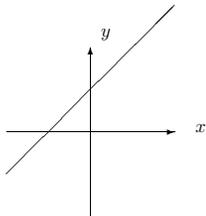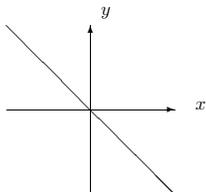Which of the following subsets in the plane are linear spaces?
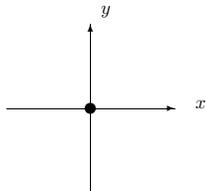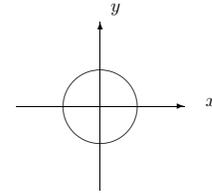
- Positive real axes.
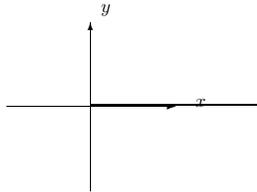
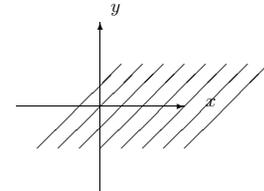- The line $-x + y = 1$

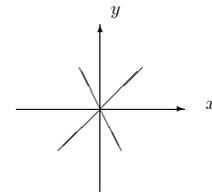- The line $x - y = 0$

- The point $\{0\}$

- The unit circle.

- The whole plane.

- The union of the two lines

- The upper half plane.