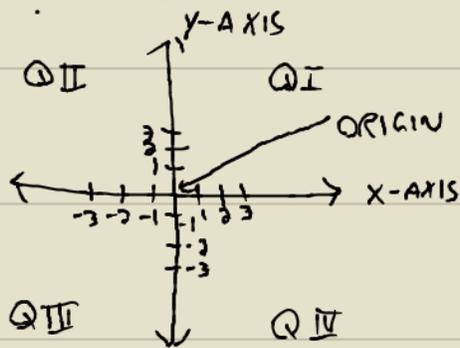


# RECTANGULAR COORDINATE SYSTEM



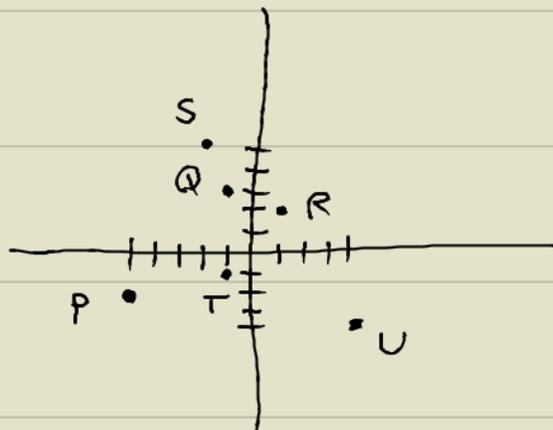
## POINTS

$$(3, 1)$$

$\underline{\underline{3}}$   $\underline{\underline{1}}$   
 $x$  PART  $y$  PART



1. P(-5, -2) Q(-1, 3) R(1, 2) S(-2, 5) T(-1, -1) U(4, -4)



2. A (-2, 4) Q II

B (3, 1) Q I

C (4, -1) Q IV

D (0, -2) y-axis

E (-4, 0) x-axis

3.  $y = 5x - 1$

A  $\begin{pmatrix} 3 \\ x \end{pmatrix}, \begin{pmatrix} 14 \\ y \end{pmatrix}$

$$14 \stackrel{?}{=} 5(3) - 1$$

$$14 \stackrel{?}{=} 15 - 1$$

$$14 \checkmark = 14 \quad \text{YES}$$

B  $\begin{pmatrix} 2 \\ x \end{pmatrix}, \begin{pmatrix} 3 \\ y \end{pmatrix}$

$$3 \stackrel{?}{=} 5(2) - 1$$

$$3 \stackrel{?}{=} 10 - 1$$

$$3 \neq 9 \quad \text{NO}$$

4.  $x + y = 5$

$$7 + y = 5$$

$$y = 5 - 7$$

$$y = -2$$

$$(7, -2)$$

C  $\begin{pmatrix} -2 \\ x \end{pmatrix}, \begin{pmatrix} -11 \\ y \end{pmatrix}$

$$-11 \stackrel{?}{=} 5(-2) - 1$$

$$-11 \stackrel{?}{=} -10 - 1$$

$$-11 \checkmark = -11 \quad \text{YES}$$

5.  $8x - 2y = 18$

$$8x - 2(3) = 18$$

$$8x - 6 = 18$$

$$8x = 18 + 6$$

$$8x = 24$$

$$\frac{8x}{8} = \frac{24}{8}$$

$$x = 3$$

$$(3, 3)$$