RECTANGULAR COORDINATE SYSTEM

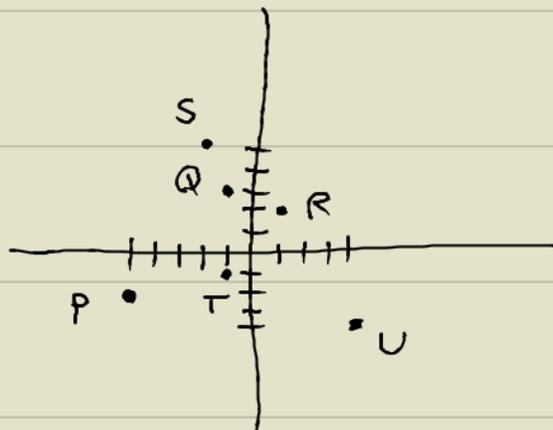
POINTS

$$\left(\underset{x\ PART}{\underset{=}{3}}, \underset{y\ PART}{\underset{=}{1}}\right)$$
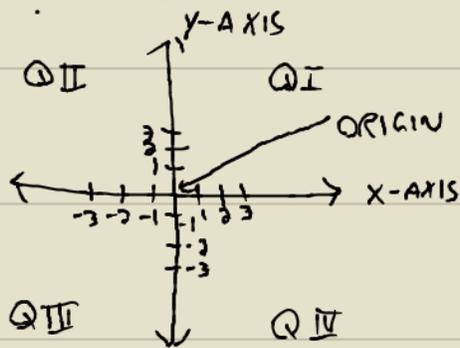
1. $P(-5,-2)$ $Q(-1,3)$ $R(1,2)$ $S(-2,5)$ $T(-1,-1)$ $U(4,-4)$

2. A $(-2,4)$ QII
    B $(3,1)$ QI
    C $(4,-1)$ QIV
    D $(0,-2)$ y-AXIS
    E $(-4,0)$ x-AXIS

3. $y = 5x - 1$

    A $(\underset{x}{3},\underset{y}{14})$ $14 \overset{?}{=} 5(3) - 1$
                        $14 \overset{?}{=} 15 - 1$
                        $14 \overset{\checkmark}{=} 14$ YES

    B $(\underset{x}{2},\underset{y}{3})$ $3 \overset{?}{=} 5(2) - 1$
                        $3 \overset{?}{=} 10 - 1$
                        $3 \neq 9$ NO

    C $(\underset{x}{-2},\underset{y}{-11})$ $-11 \overset{?}{=} 5(-2) - 1$
                        $-11 \overset{?}{=} -10 - 1$
                        $-11 \overset{\checkmark}{=} -11$ YES

4. $x + y = 5$

   $7 + y = 5$

   $y = 5 - 7$

   $y = -2$

   $\boxed{(7,-2)}$

5. $8x - 2y = 18$
   $8x - 2(3) = 18$
   $8x - 6 = 18$
   $8x = 18 + 6$
   $8x = 24$

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

   $x = 3$

   $\boxed{(3,3)}$