

$$\text{Centroid (Red)} = \left(\frac{9}{4}, \frac{16}{4} \right) = \left(\frac{9}{4}, 4 \right)$$

$$\text{Centroid (Blue)} = \left(\frac{9}{3}, \frac{12}{3} \right) = (3, 4)$$

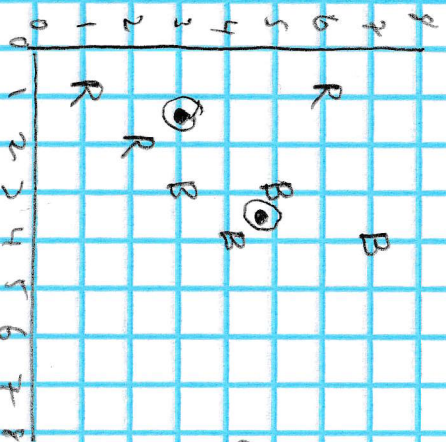
	$R \subseteq U$	$R \cap U$
P_1	$(3-1)^2 + (4-1)^2 = 13$	$(9/4-1)^2 + (4-1)^2 = 10.56$
P_2	$(3-2)^2 + (4-2)^2 = 5$	$(9/4-2)^2 + (4-2)^2 = 4.06$
P_3	$(3-3)^2 + (4-3)^2 = 1$	$(9/4-3)^2 + (4-3)^2 = 1.56$
P_4	$(3-4)^2 + (4-4)^2 = 1$	$(9/4-4)^2 + (4-4)^2 = 3.06$
P_5	$(3-1)^2 + (4-6)^2 = 8$	$(9/4-1)^2 + (4-6)^2 = 5.56$
P_6	$(3-3)^2 + (4-5)^2 = 1$	$(9/4-3)^2 + (4-5)^2 = 1.56$
P_7	$(3-4)^2 + (4-7)^2 = 10$	$(9/4-4)^2 + (4-7)^2 = 12.06$

$$P_1 = R, P_2 = R, P_3 = B, P_4 = B$$

$$P_5 = R, P_6 = B, P_7 = B$$

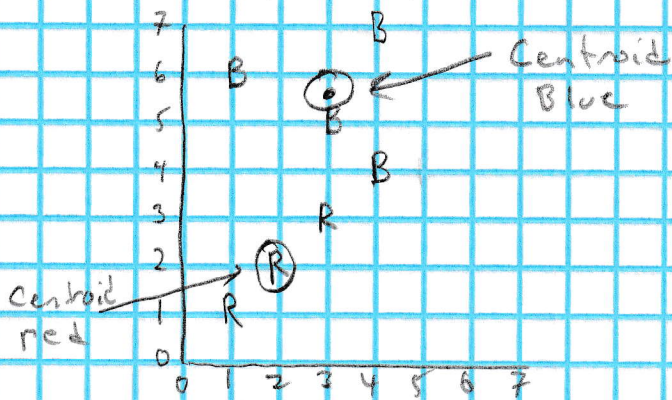
$$\text{Centroid (Red)} = \left(\frac{4}{3}, 3 \right) = (1.33, 3)$$

$$\text{Centroid (Blue)} = \left(\frac{14}{4}, \frac{14}{4} \right) = (3.5, 3.5)$$



Blue	Red
$P_1 (3.5-1)^2 + (4.75-1)^2 = 16.81$	$(4/3-1)^2 + (3-1)^2 = 4.11$
$P_2 (3.5-2)^2 + (4.75-2)^2 = 9.81$	$(4/3-2)^2 + (3-2)^2 = 1.44$
$P_3 (3.5-3)^2 + (4.75-3)^2 = 3.31$	$(4/3-3)^2 + (3-3)^2 = 2.78$
$P_4 (3.5-4)^2 + (4.75-4)^2 = 0.81$	$(4/3-4)^2 + (3-4)^2 = 8.11$
$P_5 (3.5-5)^2 + (4.75-5)^2 = 7.81$	$(4/3-5)^2 + (3-6)^2 = 9.11$
$P_6 (3.5-6)^2 + (4.75-6)^2 = 0.31$	$(4/3-6)^2 + (3-9)^2 = 6.78$
$P_7 (3.5-7)^2 + (4.75-7)^2 = 5.31$	$(4/3-7)^2 + (3-12)^2 = 23.11$

$$P_1 = R, P_2 = R, P_3 = R, P_4 = B, P_5 = B, P_6 = B, P_7 = B$$



$$\text{Centroid (Red)} = (2, 2)$$

$$\text{Centroid (Blue)} = (3, 1/2)$$