

Question 5: let $A=0$
 $B=1$

(a) 1. $z = 2x_1 + x_2 - 4$

$$z = 2(1) + (2) - 4$$

$$z = 0$$

$$y = 0$$

label value = 0

2. $z = 2x_1 + x_2 - 4$

$$z = 2(2) + (6) - 4$$

$$z = 6$$

$$y = 1$$

label value = 1

3. $z = 2(x_1) + (x_2) - 4$

$$z = 2(1) + (3) - 4$$

$$z = 1$$

$$y = 1$$

label value = 1

4. $z = 2(x_1) + (x_2) - 4$

$$z = 2(3) + (4) - 4$$

$$z = 6$$

$$y = 1$$

label value = 1

$$\begin{aligned} \textcircled{b} \quad \text{Accuracy} &= \frac{tp + \cancel{fp} + tn}{tp + fp + tn + fn} \\ &= \frac{2 + 1}{2 + 1 + 1 + 0} \\ &= 0.75 \end{aligned}$$

$$\begin{aligned} \text{Precision} &= \frac{tp}{tp + fp} \\ &= \frac{2}{2 + 1} \\ &= 0.667 \end{aligned}$$