

1. a.

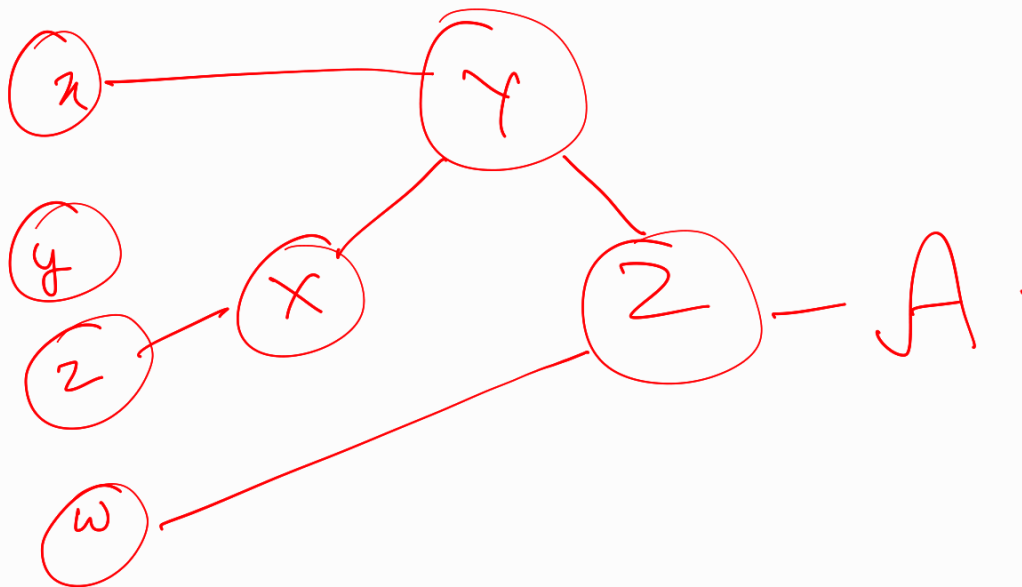
i), ii).

$$A = (x + (y \cdot z))w.$$

let  $X = yz$ ;

$$Y = x + X$$

$$Z = Y \cdot w.$$



$$\beta = \sqrt{x + y + z^2} - \log\left(\frac{x}{w}\right)$$

Assuming,

$$L = x + y \quad Q = \sqrt{N}$$

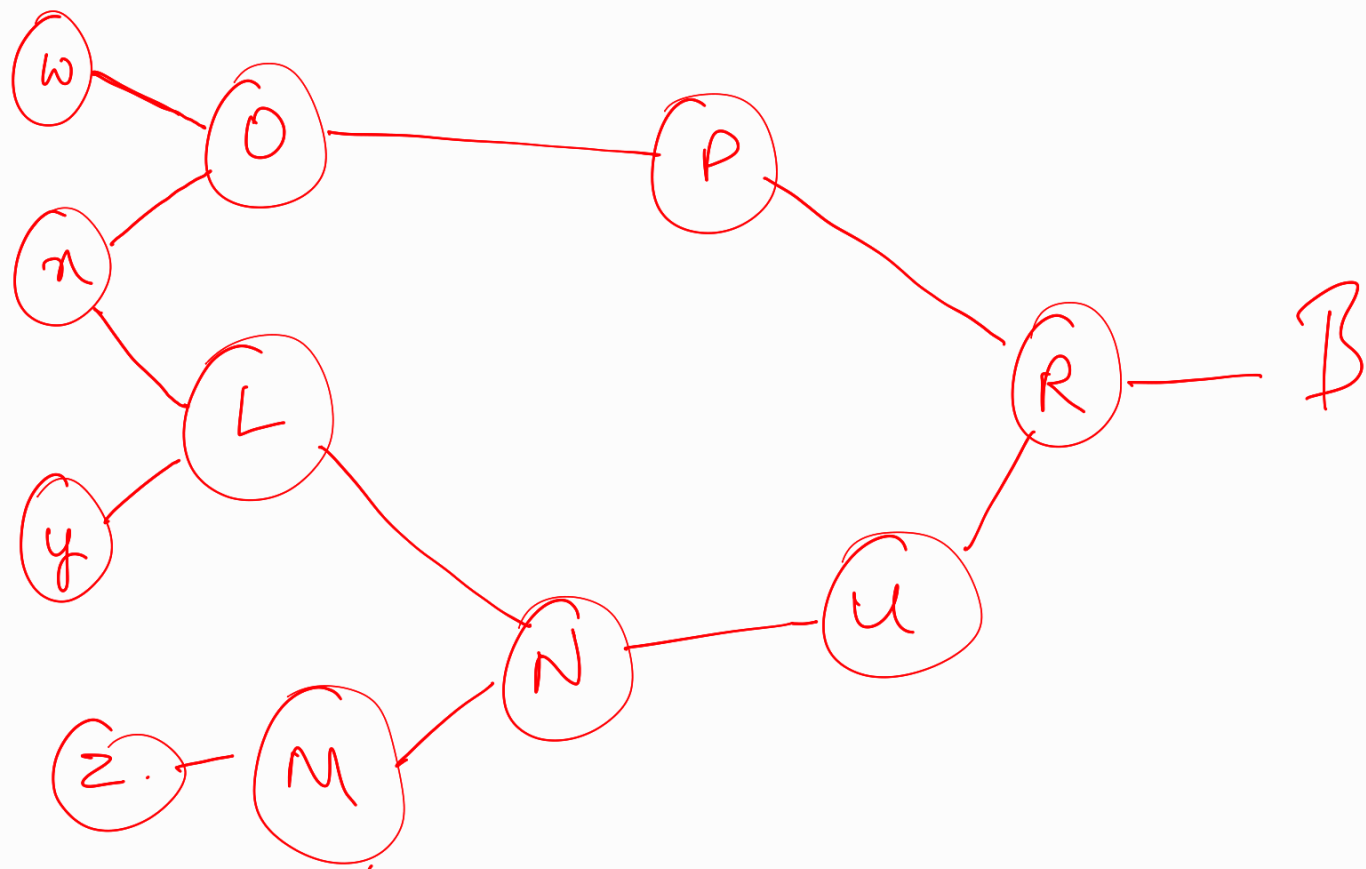
$$M = 2^3$$

$$R = Q - P.$$

$$N = L + M.$$

$$O = \frac{x}{w}$$

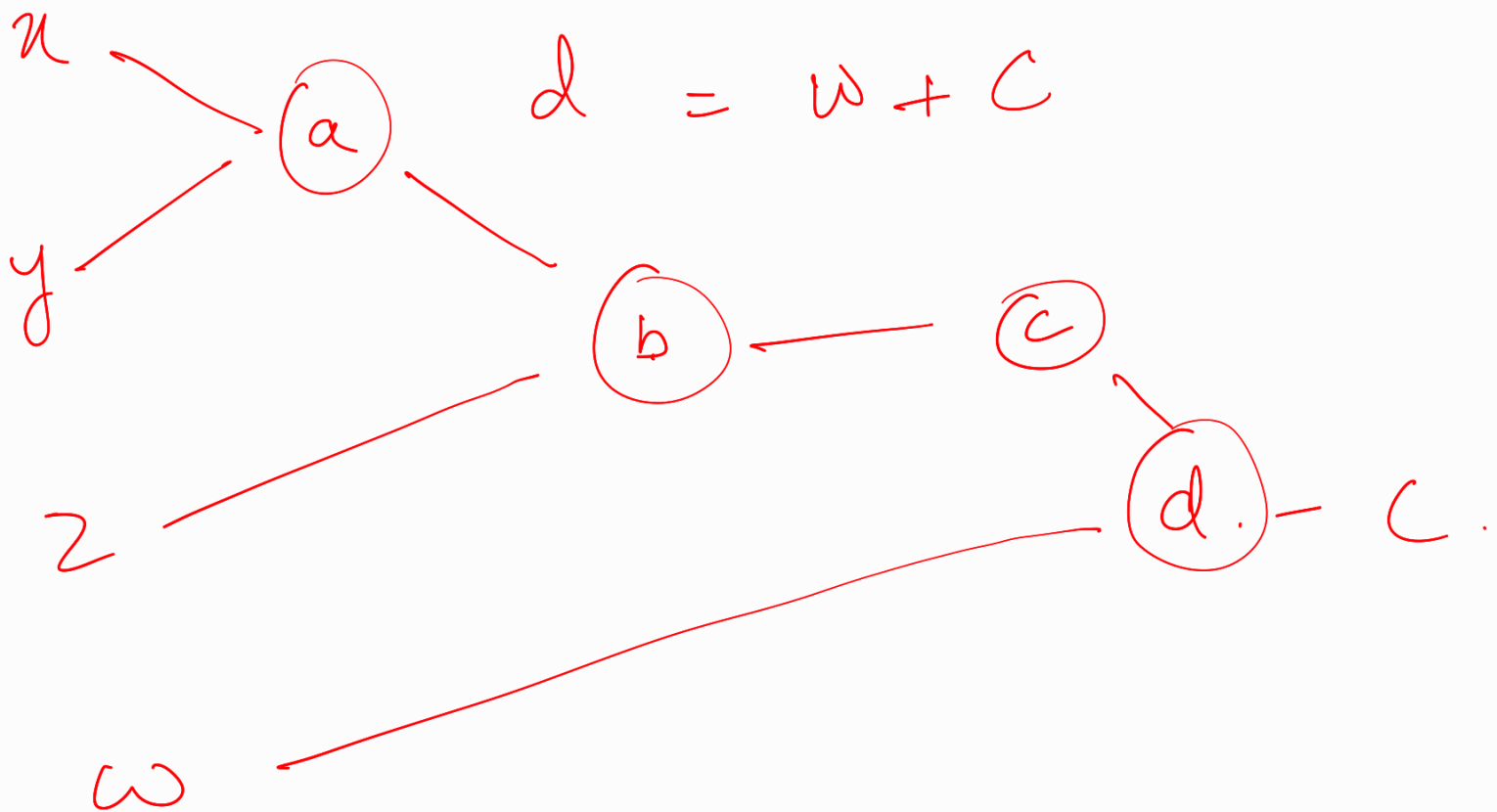
$$P = \log(O)$$



$$C = d + \exp^{(x+y)z}.$$

$$a = x + y. \quad b = a \cdot z.$$

$$C = \exp^b.$$



iii).  $x = 3$

$$y = 5.$$

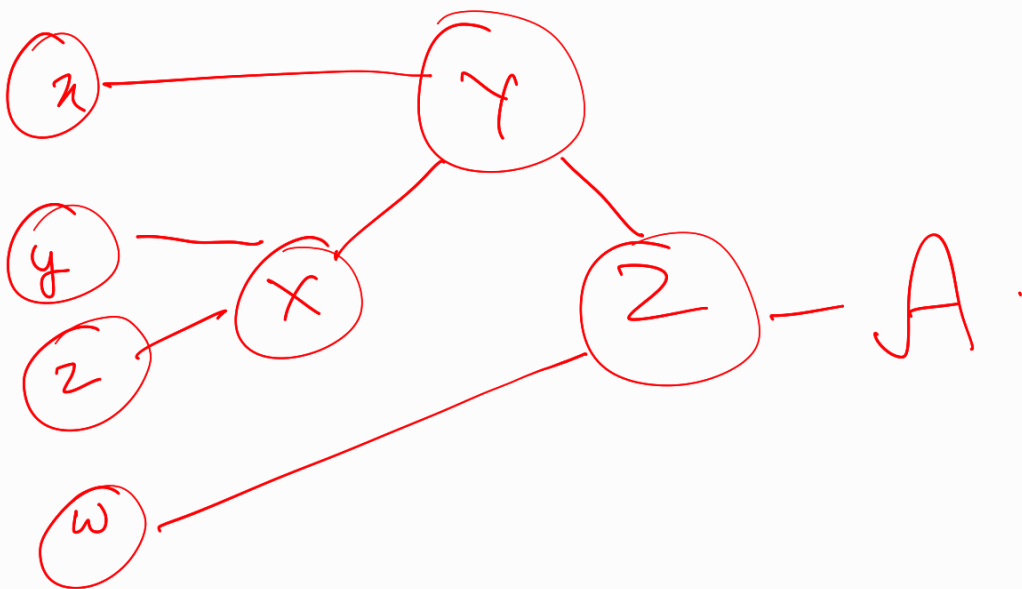
$$z = -1.$$

$$A = (x + (y \cdot z))w.$$

$$\text{let } x = yz;$$

$$y = x + x^{-5}$$

$$z = y \cdot w.$$



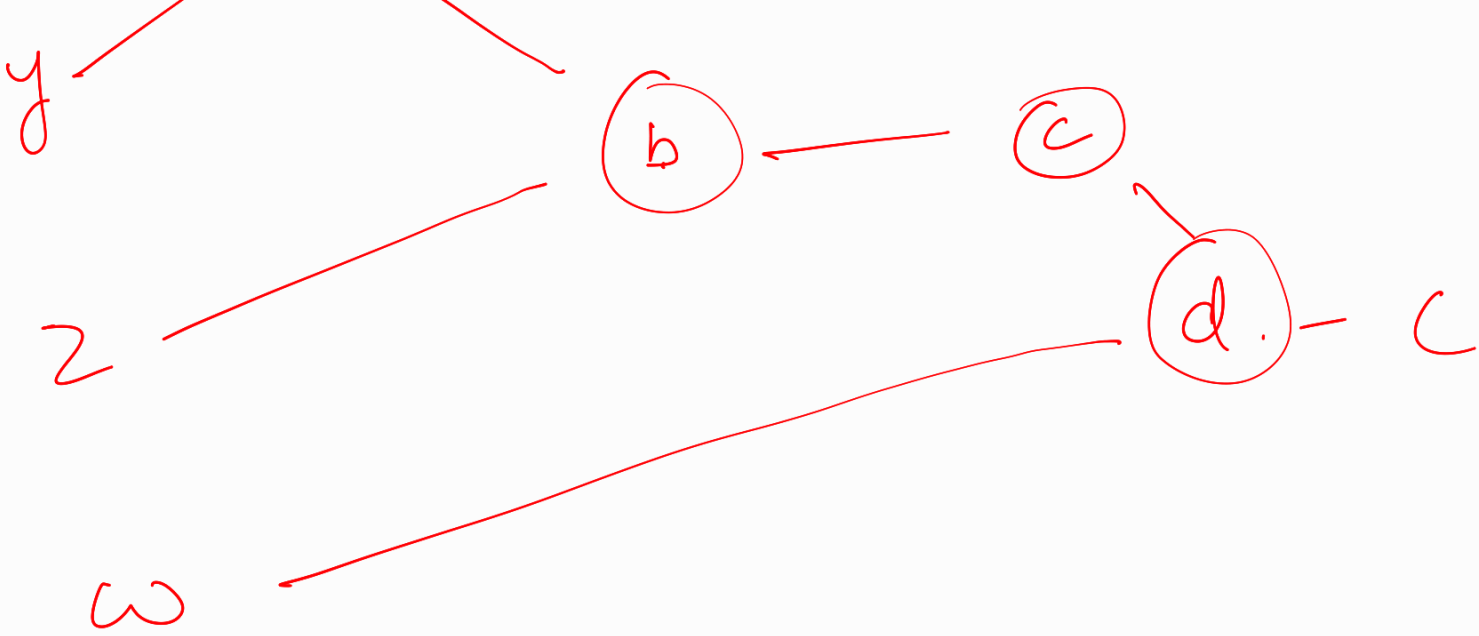
$$a = x + y.$$

$$b = a \cdot z.$$

$$c = \exp(b.)$$

$$d = w + c \exp(-8)$$





iv) Back Propagation .

