

Problem 1:

$$a = 3 * (-6) + (-2) * 2 + 8 * 5 + 10 * (-4) + (-6) * (-2) + 1 * 7$$

$$a = -3$$

$$y = f(a) = \frac{1}{1 + e^a} = 0.95257$$

$$y = \mathbf{0.95257}$$

Problem 2:

1. W_3

Problem 3:

1. 2

Problem 4:

1. 4