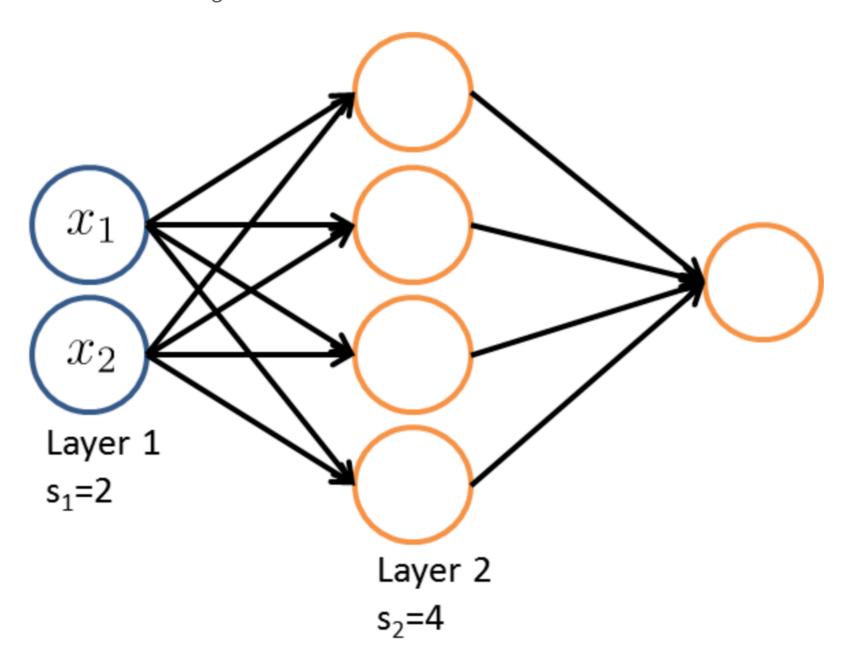
Consider the following neural network:

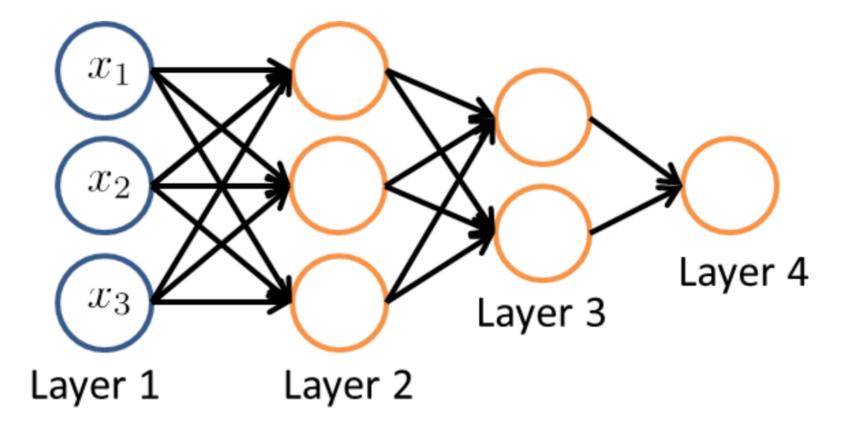


What is the dimension of  $\Theta^{(1)}$  (Hint: add a bias unit to the input and hidden layers)?

- $\bigcirc~2 imes4$
- $\bigcirc~4 imes2$
- $\bigcirc~3 imes4$
- $\odot~4 imes3$

Correct

Consider the network:



Let  $a^{(1)} = x \in \mathbb{R}^{n+1}$  denote the input (with  $a_0^{(1)} = 1$ ).

How would you compute  $a^{(2)}$ ?

$$a^{(2)} = \Theta^{(1)}a^{(1)}$$

$$\bigcirc z^{(2)} = \Theta^{(2)}a^{(1)}; \ a^{(2)} = g(z^{(2)})$$

• 
$$z^{(2)} = \Theta^{(1)}a^{(1)}; \ a^{(2)} = g(z^{(2)})$$

Correct

$$\int z^{(2)} = \Theta^{(2)}g(a^{(1)}); \ a^{(2)} = g(z^{(2)})$$

Continue