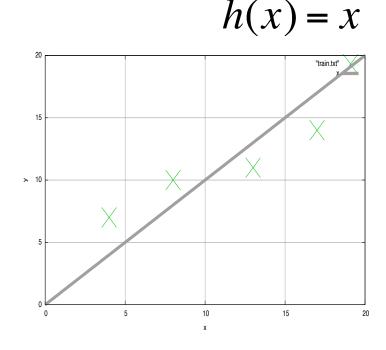
## Hypothesis vs. Cost function ( $\theta 1=1$ )

 $\theta 0=0, \ \theta 1=1, (x,y)=(4,7), (8,10), (13,11)$ 

## **Hypothesis:**

## **Cost function:**



$$J(\theta_0, \theta_1) = \frac{1}{2m} \sum_{i=1}^{m} (h_{\theta}(x^{(i)}) - y^{(i)})^2$$
$$J(0,1) = \frac{1}{2m} ((4-7)^2 + (8-10)^2 + (13-11)^2)$$

$$J(0,1) = \frac{1}{2m}((4-7)^2 + (8-10)^2 + (13-11)^2)$$

$$J(0,1) = \frac{1}{2*3}(9+4+4) = \frac{17}{6} = 2.83$$

