1.6 Handout (Cobwebbing and Equilibria)

For each of the following discrete dynamical systems, (a) make a cobweb diagram with the specified initial condition, and (b) find the equilibria. Are the equilibria stable or unstable?

1.
$$m_{t+1} = m_t + 1, m_0 = 1.$$

2.
$$b_{t+1} = 2b_t$$
, $b_0 = 5$.

3.
$$r_{t+1} = 0.25r_t + 3, r_0 = 1.$$

4. Same system as problem 3, but $r_0 = 6$.