

## Assignment 4

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$$10m_1 - 2m_2 + m_3 = 9$$

$$-2m_1 + 10m_2 - 2m_3 = 12$$

$$-2m_1 - 5m_2 + 10m_3 = 18$$

$$m_1 = 0.2m_2 - 0.1m_3 + 0.9$$

$$m_2 = \cancel{8m_1/4} \cancel{m_3/4} 0.2m_1 + 0.2m_3 + 1.2$$

$$m_3 = \cancel{-2m_1/10} 0.2m_1 + 0.5m_2 + 1.8$$

$$m[0, 0, 0]$$

1st  $m_1 = 0.2(0) - 0.1(0) + 0.9 = 0.9$

$$m_2 = 0.2(0) + 0.2(0) + 1.2 = 1.2$$

$$m_3 = 0.2(0) + 0.5(0) + 1.8 = 1.8$$

2nd  $m_1 = 0.2(0.9) - 0.1(0.9) + 0.9 = 1.00$

$$m_2 = 0.2(1.2) + 0.2(1.2) + 1.2 = 1.68$$

$$m_3 = 0.2(1.8) + 0.5(1.8) + 1.8 = 3.06$$

3rd  $m_1 = 0.2(1) - 0.1(1) + 0.9 = 1.00$

$$m_2 = 0.2(1.68) + 0.2(1.68) + 1.2 = 1.87$$

$$m_3 = 0.2(3.06) + 0.5(3.06) + 1.8 = 3.94$$