

2) a)  $x_{1,2} = \frac{1 \pm \sqrt{49}}{4}$      $x_1 = 2$      $x_2 = -1.5$

b)  $x_{1,2} = \frac{7 \pm \sqrt{97}}{4}$      $x_1 = 4.212$      $x_2 = -0.712$

c) No solutions, because discriminant  $D = 3^2 - 4 \cdot 1 \cdot 4 = -7 < 0$

d)  $y_{1,2} = \frac{4 \pm \sqrt{128}}{8}$      $y_1 = 1.914$      $y_2 = -0.914$

e)  $z_{1,2} = \frac{18 \pm \sqrt{1764}}{10}$      $z_1 = 6$      $z_2 = -2.4$

(The resulting quadratic equation is:  $5z^2 - 18z - 72 = 0$  )