

2) a) Two solutions:  $x_1 = 2 \quad y_1 = 2$   
 $x_2 = -4 \quad y_2 = 8$

*Lösungsweg:*

Solve Eq1 for y:  $y = 0.5x^2$  (\*)

Insert it into Eq2 and rearrange; you get a quadratic equation

$$0.5x^2 + x - 4 = 0$$

with the solutions above for x.

y-values by inserting x-values into (\*).

b) Two solutions:  $x_1 = -1 \quad y_1 = 1.5$   
 $x_2 = 4 \quad y_2 = -1$

*Lösungsweg:*

Solve Eq1 for x:  $x = 2 - 2y$  (\*\*)

Insert it into Eq2 and rearrange; you get a quadratic equation

$$2y^2 - y - 3 = 0$$

with the solutions above for y.

x-values by inserting y-values into (\*\*).