

A 1.1) $c=2,5$ $A(-1/6) \Rightarrow 6 = a - b + 2,5 \checkmark \quad 1 \cdot 4 \}$
 ⑥ $B(4/-1,5) \Rightarrow -1,5 = 16a + 4b + 2,5 \checkmark$

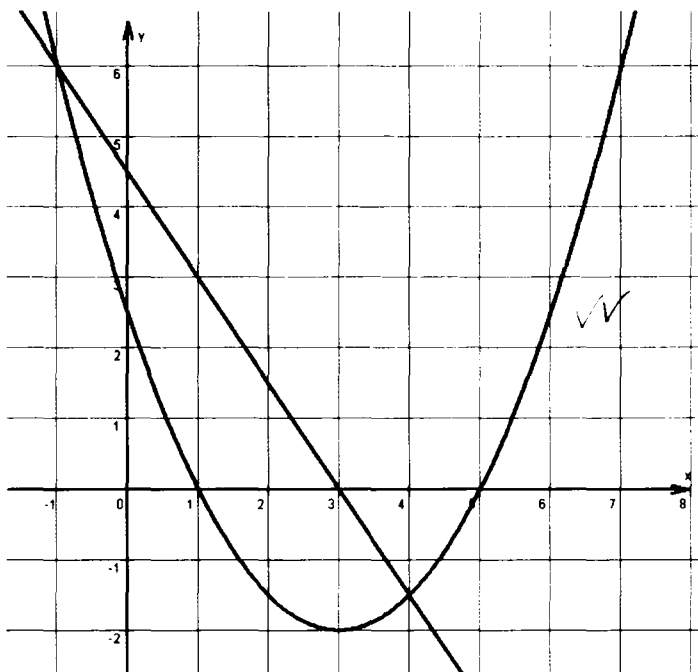
$$\frac{22,5 = 20a + 12,5 \checkmark}{\Rightarrow 10 = 20a} \quad a = 0,5 \checkmark$$

$6 = 0,5 - b + 2,5 \Rightarrow b = -3 \checkmark$ also $f(x) = 0,5x^2 - 3x + 2,5 \checkmark$

1.2) $0 = 0,5x^2 - 3x + 2,5$ $x_{1,2} = \frac{3 \pm \sqrt{9 - 4 \cdot 0,5 \cdot 2,5}}{2 \cdot 0,5} = \frac{3 \pm 2}{1} \checkmark$

⑥ $x_1 = 1 \quad x_2 = 5 \checkmark$

$x_s = \frac{1+5}{2} = 3 \checkmark \quad y_s = 4,5 - 9 + 2,5 = -2 \checkmark \quad S(3/-2) \checkmark$



1.3) $m = \frac{6 - (-1,5)}{-1 - 4} \checkmark$
 ③ $= -\frac{7,5}{5} = -1,5 \checkmark$

$6 = -1,5 \cdot (-1) + t$
 $\Rightarrow t = 4,5 \checkmark$

$y = -1,5x + 4,5 \checkmark$

2.1) $x_s = \frac{4a}{2a} = 2 \checkmark$

② $y_s = 4a - 8a + 2 = -4a + 2 \checkmark$
 $S(2/-4a+2) \checkmark$

2.2) $x=2 \Rightarrow y = -4 + 10 = 6 \checkmark \checkmark$

③ $-4a + 2 = 6 \checkmark \Rightarrow a = -1 \checkmark$

2.3) $-x^2 + 4x + 2 > -2x + 10 \checkmark \Leftrightarrow -x^2 + 6x - 8 > 0 \checkmark$

⑤ Los. der Gleichung:

$$x_{1,2} = \frac{-6 \pm \sqrt{36 - 4(-1)(-8)}}{-2} = \frac{-6 \pm 2}{-2}$$

$x_1 = 2 \quad x_2 = 4 \checkmark \checkmark$

Los. der Ungleichung:



$\Rightarrow 2 < x < 4 \checkmark \checkmark$

3.) $x_1 = 2 \checkmark$ $(2x^3 - 4x^2 + 3x - 6) : (x-2) = 2x^2 + 3 \checkmark$

④
$$\begin{array}{r} (2x^3 - 4x^2 + 3x - 6) \\ -(2x^3 - 4x^2) \\ \hline 3x - 6 \\ -(3x - 6) \\ \hline 0 \end{array}$$

$2x^2 + 3$ immer positiv $\checkmark$

d.h. $x_1 = 2$ ist einzige Nullstelle $\checkmark$