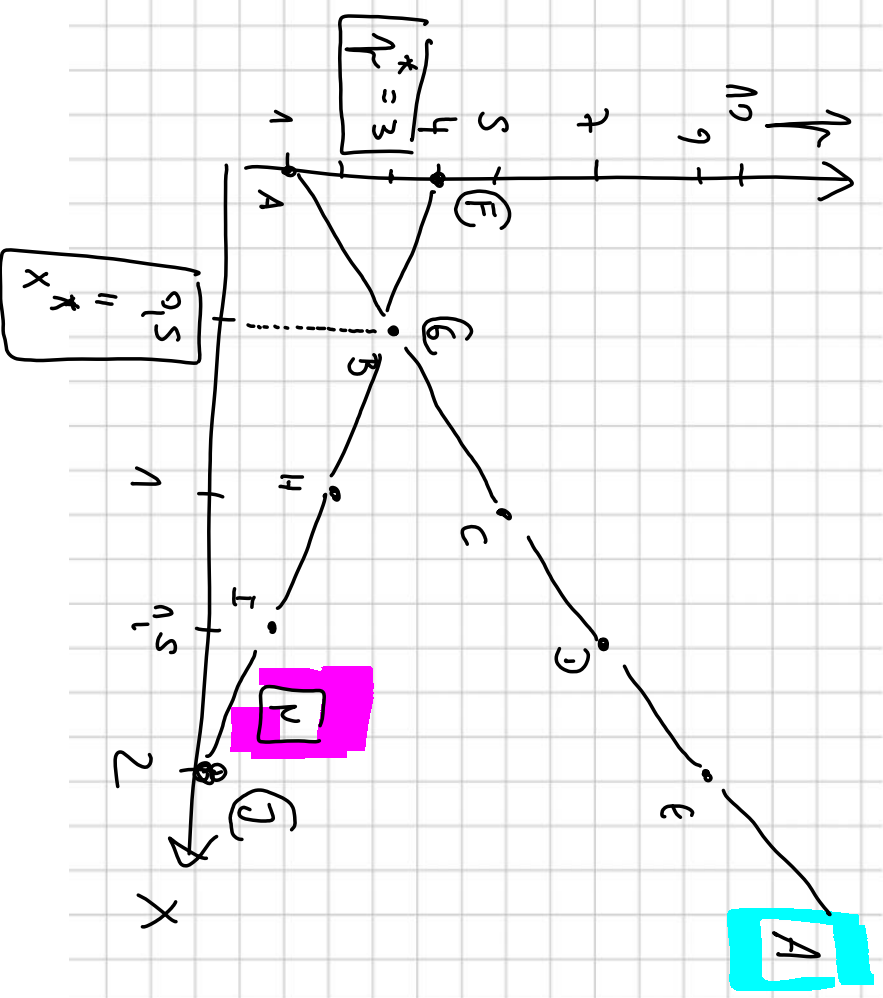


$$r = 1 + 4 \cdot x^A$$

$$r = 4 - 2 \cdot x^N$$

x^A	0	0,5	1	1,5	2
r	1	3	5	7	9
(A)	(B)	(3)	(C)	(D)	(E)
x^N	0	0,5	1	1,5	2
r	4	3	2	1	0
(F)	(G)	(H)	(I)	(J)	(K)



$$A = N \Leftrightarrow 1 + 4 \cdot X = 4 - 2 \cdot X \quad | + 2X$$

$$\Leftrightarrow 1 + 4 \cdot X = 4 - \underbrace{2X + 2X}_0$$

$$\Leftrightarrow 1 + 6X = 4 \quad | -1$$

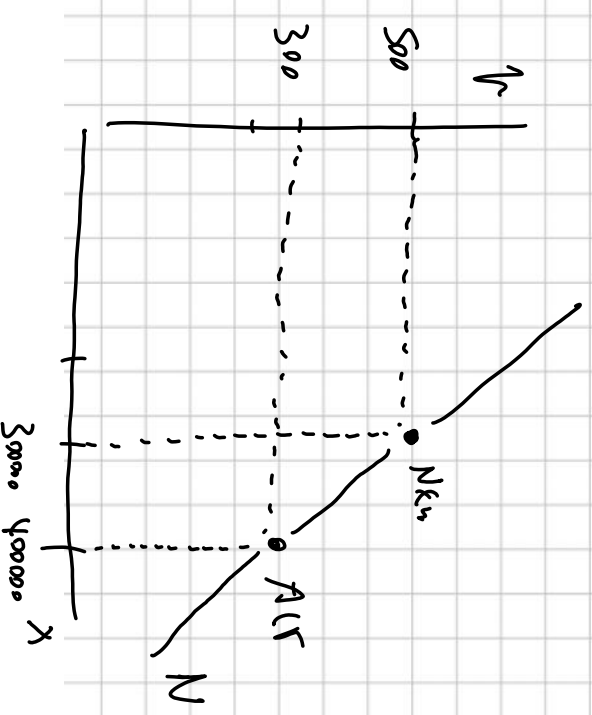
$$\Leftrightarrow 1 + 6X - 1 = 4 - 1$$

$$\Leftrightarrow 1 - 1 + 6X = 3 \quad \Leftrightarrow 6X = 3 \quad | :6 \quad \Leftrightarrow \boxed{X = 0,5}$$

$$r = 1 + 4 \cdot x = 1 + 4 \cdot 0,5 = 1 + 2 = \underline{\underline{3}}$$

$$r = 4 - 2 \cdot x = 4 - 2 \cdot 0,5 = 4 - 1 = \underline{\underline{3}} = \boxed{r^*}$$

r	x
2014	300
2015	500
	400.000
	300.000



c)

Preisindex =

$$= \frac{\frac{x_{neu} - x_{alt}}{x_{alt}}}{\frac{x_{neu} - x_{alt}}{x_{alt}}}$$

Rel. Mengenänderung

Rel. Preis =

$$\frac{300.000 - 400.000}{400.000}$$

$$\frac{500 - 300}{300}$$

$$= \frac{-25\%}{+66,67\%} = -0,375$$

$\uparrow \uparrow$ um 1% $\rightarrow X^2 \downarrow$ um 0,375%
 $\uparrow \uparrow$ um 10% $\rightarrow X^2 \downarrow$ um 3,75%
 $\uparrow \downarrow$ um 20% $\rightarrow X^2 \uparrow$ um 7,5%

$\boxed{3} \mid$ $\uparrow \uparrow$ um 4% $\xrightarrow{\text{Preiselast.} = -3}$ $X^2 \downarrow$ um $\underbrace{12\%}_{2 \cdot \text{Preiselast.} = 2 \cdot 6}$
 a

e) $\uparrow \downarrow$ um 3% $\xrightarrow{\text{Preiselast.} = -5}$ $X \uparrow$ um 15%

