

$$\textcircled{1} \quad P(-2|-1) \quad Q(-1|7)$$

$$m = \frac{7 - (-1)}{(-1) - (-2)} = \frac{7+1}{-1+2} = \frac{8}{1} = 8$$

$$y = m \cdot x + b \quad | -m \cdot x$$

$$b = y - m \cdot x \quad | P \text{ einsetzen}$$

$$b = -1 - 8 \cdot (-2) = -1 + 16 = 15$$

$$y = 8x + 15$$

$$\textcircled{2} \quad P(1|-1) \quad Q(5|6)$$

$$m = \frac{6 - (-1)}{5 - 1} = \frac{6+1}{4} = \underline{\underline{\frac{7}{4}}}$$

$$b = 6 - \frac{7}{4} \cdot 5 = -\frac{11}{4}$$

$$y = \frac{7}{4}x - \frac{11}{4}$$

$$\textcircled{3} \quad P(-1|-1,5) \quad Q(5|4)$$

$$m = \frac{4 - (-1,5)}{5 - (-1)} = \frac{4+1,5}{5+1} = \frac{5,5}{6} = \underline{\underline{\frac{11}{12}}}$$

$$b = 4 - \frac{11}{12} \cdot 5 = -\frac{7}{12}$$

$$y = \frac{11}{12}x - \frac{7}{12}$$

$$\textcircled{4} \quad P(-4|7) \quad Q(5|0)$$

$$m = \frac{0-7}{5-(-4)} = \frac{-7}{5+4} = \underline{\underline{\frac{-7}{9}}}$$

$$b = 0 - \left(\frac{-7}{9}\right)5 = +\underline{\underline{\frac{35}{9}}}$$

$$y = -\frac{7}{9}x + \frac{35}{9}$$