

S 63/1

$$a) x_s = -\frac{-6}{2 \cdot 2} = \frac{3}{2} ; y_s = \frac{1}{2} \Rightarrow \underline{f(x) = 2 \left(x - \frac{3}{2}\right)^2 + \frac{1}{2}}$$

$$b) x_s = -\frac{4}{2 \cdot (-3)} = \frac{2}{3} ; y_s = \frac{1}{3} \Rightarrow \underline{g(x) = -3 \left(x - \frac{2}{3}\right)^2 + \frac{1}{3}}$$

$$c) x_s = 3 ; y_s = -\frac{1}{2} \Rightarrow \underline{h(x) = \frac{1}{2} (x-3)^2 - \frac{1}{2}}$$

$$d) s(x) = -\frac{1}{2}x^2 - \frac{3}{2}x - 1 ; x_s = -\frac{3}{2} ; y_s = \frac{1}{8}$$

$$\underline{s(x) = -\frac{1}{2} \left(x + \frac{3}{2}\right)^2 + \frac{1}{8}}$$

$$e) \underline{p(x) = -\frac{3}{4}x^2 - 1} \Rightarrow x_s = 0 ; y_s = -1$$

$$f) \underline{r(x) = -\frac{1}{2} \left[3 \left(x + \frac{1}{3}\right)\right]^2 + 2 = -\frac{9}{2} \left(x + \frac{1}{3}\right)^2 + 2}$$

S 70/2

$$a) y = (x-3)(x-4)$$

$$b) y = (x+3)(x-2)$$

$$c) y = \frac{1}{2}(t^2 + 2t - 3) = \frac{1}{2}(t+3)(t-1)$$

$$d) v = -(s^2 - 4s + 4) = -(s-2)^2$$

$$e) y = 6 \left(x^2 + \frac{1}{6}x - \frac{2}{6}\right) = 6 \left(x + \frac{1}{6}\right) \left(x - \frac{2}{6}\right)$$

$$f) s = -12 \left(x - \frac{3}{2}\right) \left(x + \frac{1}{3}\right)$$

$$g) y = \frac{1}{2} \text{ keine NST} \Rightarrow \text{keine L.F.}$$

$$h) v = 7 \cdot (r^2 - 2) = 7 \cdot (r^2 - \sqrt{2}^2) = 7(r + \sqrt{2})(r - \sqrt{2})$$

B.70