

S. 85/10c

$$\begin{aligned}
 f(z) &= 0,75(z^2 + 1)^2 - 2,3 \\
 &= 0,75(4z^2 + 4z + 1) - 2,3 \\
 &= \underbrace{3z^2 + 3z + 0,75} - 2,3 \\
 &= 3\left(z^2 + z + \left(\frac{1}{2}\right)^2 - \left(\frac{1}{2}\right)^2\right) - 1,55 \\
 &\quad \begin{array}{l} a^2 + 2ab + b^2 \\ a \hat{=} z \\ 2ab = z \Rightarrow b = \frac{1}{2} \end{array} \\
 &= 3\left(\left(z + \frac{1}{2}\right)^2 - \frac{1}{4}\right) - 1,55 \\
 &= 3\left(z + \frac{1}{2}\right)^2 - \underbrace{0,75 - 1,55}_{-2,3} \\
 &= 3\left(z + \frac{1}{2}\right)^2 - 2,3 \\
 &\quad S(-0,5 \mid -2,3)
 \end{aligned}$$

$$\begin{aligned}
 10d) \quad f(x) &= 0,75(2-x)^2 - 2,4x \\
 &= 0,75(4 - 4x + x^2) - 2,4x \\
 &= 3 - \underline{3x} + 0,75x^2 - \underline{2,4x} \\
 &= 0,75x^2 - 5,4x + 3 \\
 &= 0,75\left(x^2 - \frac{36}{5}x + \left(\frac{18}{5}\right)^2 - \left(\frac{18}{5}\right)^2\right) + 3 \\
 &\quad \begin{array}{l} a^2 - 2ab + b^2 \\ a \hat{=} x \\ \frac{36}{5}x \hat{=} 2ab \Rightarrow b = \frac{18}{5} \end{array}
 \end{aligned}$$

$$\begin{aligned}
&= 0,75 \left(\left(x - \frac{18}{5} \right)^2 - \frac{324}{25} \right) + 3 \\
&= 0,75 \left(x - \frac{18}{5} \right)^2 - 9,72 + 3 \\
&= \underline{\underline{0,75}} \left(x - \frac{18}{5} \right)^2 - 6,72 \\
&\quad \quad \quad \text{S}(3,6 | -6,72)
\end{aligned}$$