

No 14	Test B	Name	P:	N:
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Bringe jeweils auf die Form: $y = a(x + b)^2 + c$

① $y = x^2 - 4x + 7$

$$y = x^2 - 4x + 7 + \cancel{4} - 4$$

$$y = (x - 2)^2 + 7 - 4$$

$$y = \underline{\underline{(x - 2)^2 + 3}}$$

② $y = x^2 + 8x$

$$y = x^2 + 8x + \cancel{16} - 16$$

$$y = \underline{\underline{(x + 4)^2 - 16}}$$

③ $y = 4x^2 + 24x + 30$

$$y = 4(x^2 + 6x + 7,5)$$

$$y = 4[x^2 + 6x + \cancel{9} - 9 + 7,5]$$

$$y = 4[(x + 3)^2 - 1,5]$$

$$y = \underline{\underline{4(x + 3)^2 - 6}}$$

④ $y = -3x^2 + 18x - 9$

$$y = -3[x^2 - 6x + 3]$$

$$y = -3[x^2 - 6x + \cancel{9} - 9 + 3]$$

$$y = -3[(x - 3)^2 - 6] = \underline{\underline{-3(x - 3)^2 + 18}}$$

⑤ $y = \frac{2}{3}x^2 - 4x + 9$

$$y = \frac{2}{3}[x^2 - 6x + 13,5 + \cancel{9} - 9]$$

$$y = \frac{2}{3}[(x - 3)^2 + 4,5]$$

$$y = \underline{\underline{\frac{2}{3}(x - 3)^2 + 3}}$$