Aufgaben:

Lösung:

1. $y(x) = -0{,}25(x-2)^2 + 1{,}25$

$y(x) = -0{,}25x^2 + x + 0{,}25$

2. $y(x) = -4(x-1{,}5)^2 + 0{,}5$

$y(x) = -4x^2 + 12x - 8{,}5$

3. $y(x) = 2(x-3)^2$

$y(x) = 2x^2 - 12x + 18$

4. $y(x) = -\frac{3}{8}(x+2)^2 - 4$

$y(x) = -\frac{3}{8}x^2 - 1\frac{1}{2}x - 5\frac{1}{2}$

5. $y(x) = -\frac{1}{3}x^2 + 2$

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

6. $y(x) = \frac{1}{3}(x-1)^2 + 2$

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

7. $y(x) = -2(x+1)^2 + 3$

$y(x) = -2x^2 - 4x + 1$

8. $y(x) = (x+0{,}5)^2 + 4{,}75$

$y(x) = x^2 + x + 5$

9. $y(x) = 0{,}5(x-1)^2 - 3$

$y(x) = 0{,}5x^2 - x - 2{,}5$

10. $y(x) = -10(x-2)^2$

$y(x) = -10x^2 + 40x - 40$

11. $y(x) = \frac{1}{2}x^2 - 3$

$y(x) = \frac{1}{2}x^2 - 3$

12. $y(x) = -2(x-1)^2 + 2$

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

13. $y(x) = \frac{2}{13}(x+4)^2 - 3$

$y(x) = \frac{2}{13}x^2 + 1\frac{3}{13}x - \frac{7}{13}$

14. $y(x) = \frac{1}{2}(x+2)^2 + 1$

$y(x) = \frac{1}{2}x^2 + 2x + 3$

15. $y(x) = 8(x+2{,}5)^2 - 2{,}5$

$y(x) = 8x^2 + 40x + 47{,}5$