

Bilde die Scheitelform mittels quadratischer Ergänzung:

| | <u>Aufgaben</u> | <u>Lösungen</u> |
|------|-------------------------|---------------------------|
| 1 . | $f(x) = x^2 + 12x - 1$ | $f(x) = (x + 6)^2 - 37$ |
| 2 . | $f(x) = x^2 - 24x + 8$ | $f(x) = (x - 12)^2 - 136$ |
| 3 . | $f(x) = x^2 + 2x - 10$ | $f(x) = (x + 1)^2 - 11$ |
| 4 . | $f(x) = x^2 + 8x - 3$ | $f(x) = (x + 4)^2 - 19$ |
| 5 . | $f(x) = x^2 + 20x - 14$ | $f(x) = (x + 10)^2 - 114$ |
| 6 . | $f(x) = x^2 + 18x + 15$ | $f(x) = (x + 9)^2 - 66$ |
| 7 . | $f(x) = x^2 - 14x + 8$ | $f(x) = (x - 7)^2 - 41$ |
| 8 . | $f(x) = x^2 - 14x + 13$ | $f(x) = (x - 7)^2 - 36$ |
| 9 . | $f(x) = x^2 + 22x + 12$ | $f(x) = (x + 11)^2 - 109$ |
| 10 . | $f(x) = x^2 - 26x - 1$ | $f(x) = (x - 13)^2 - 170$ |
| 11 . | $f(x) = x^2 + 14x$ | $f(x) = (x + 7)^2 - 49$ |
| 12 . | $f(x) = x^2 - 12x + 1$ | $f(x) = (x - 6)^2 - 35$ |
| 13 . | $f(x) = x^2 + 8x + 5$ | $f(x) = (x + 4)^2 - 11$ |
| 14 . | $f(x) = x^2 + 6x + 3$ | $f(x) = (x + 3)^2 - 6$ |
| 15 . | $f(x) = x^2 + 26x - 10$ | $f(x) = (x + 13)^2 - 179$ |
| 16 . | $f(x) = x^2 + 14x + 12$ | $f(x) = (x + 7)^2 - 37$ |
| 17 . | $f(x) = x^2 + 13$ | $f(x) = x^2 + 13$ |
| 18 . | $f(x) = x^2 + 6x + 13$ | $f(x) = (x + 3)^2 + 4$ |
| 19 . | $f(x) = x^2 - 20x - 14$ | $f(x) = (x - 10)^2 - 114$ |
| 20 . | $f(x) = x^2 - 10x + 7$ | $f(x) = (x - 5)^2 - 18$ |
| 21 . | $f(x) = x^2 + 18x - 10$ | $f(x) = (x + 9)^2 - 91$ |
| 22 . | $f(x) = x^2 - 6$ | $f(x) = x^2 - 6$ |
| 23 . | $f(x) = x^2 - 8x + 9$ | $f(x) = (x - 4)^2 - 7$ |
| 24 . | $f(x) = x^2 - 8x + 15$ | $f(x) = (x - 4)^2 - 1$ |