

## Hausaufgabe 6A: Faktorisieren

- a)  $(3x+4y)(a-b) + (2x+y)(a-b) =$   
 $(a-b)[(3x+4y)+(2x+y)] =$   
 $(a-b)(\underline{5x+5y}) = \underline{5(a-b)(x+y)}$
- b)  $(9x+8y)(a+b) - (5x+4y)(a+b) =$   
 $(a+b)[(9x+8y)-(5x+4y)] =$   
 $(a+b)(4x+4y) = \underline{4(a+b)(x+y)}$
- c)  $(2m-3n)(10by+7ax) - (2m-3n)(3ax-2by) =$   
 $(2m-3n)[(10by+7ax) - (3ax-2by)] =$   
 $(2m-3n)(\underline{4ax+12by}) = \underline{4(2m-3n)(ax+3by)}$
- d)  $(3u+4v)(6xy-7ab) + (4xy+3ab)(3u+4v) =$   
 $(3u+4v)(\underline{10xy-4ab}) = \underline{2(3u+4v)(5xy-2ab)}$
- e)  $(2a-5b)(7m-3n) - (5m+2n)(2a-5b) =$   
 $(\underline{2a-5b})(\underline{2m-5n})$
- f)  $(8y+z)(\underline{2x^2-1}) + (\underline{2x^2-1})(y-z) =$   
 $(\underline{2x^2-1})(\underline{9y}) = \underline{9y(2x^2-1)}$