Faktorisieren (herausheben)

Lösungsblatt

Level 1:

$3a + 9b =$	$3 \cdot (a + 3b)$
$5x - 10y =$	$5 \cdot (x - 2y)$
$12y + 4z =$	$4 \cdot (3y + z)$
$16ef - 2g =$	$2 \cdot (8ef - g)$
$6xyz + 14ef =$	$2 \cdot (xyz + 7ef)$

$2x - 6y + 10z =$	$2 \cdot (x - 3y + 5z)$
$4c + 8e - 16f =$	$2 \cdot (x - 3y + 5z)$
$15r - 25s - 5t =$	$5 \cdot (3r - 5s - t)$
$4ab - 2cd + 8ef =$	$2 \cdot (2ab - cd + 4ef)$
$12rs + 8ef - 20x =$	$4 \cdot (3rs + 2ef - 5x)$

Level 2:

$7a + 5ab =$	$a \cdot (7 + 5b)$
$2xy - 9y =$	$y \cdot (2x - 9)$
$4ef + 12e =$	$4e \cdot (f + 3)$
$3r - 15rs =$	$3r \cdot (1 - 5s)$
$6xyz + 14xy =$	$2xy \cdot (3z + 7)$

$7cd + 5ce + 9cf =$	$c \cdot (7d + 5e + 9f)$
$2b + 8bd + 12be =$	$2b \cdot (1 + 4d + 6e)$
$4ax - 6ay + 10az =$	$2a \cdot (2x - 3y + 5z)$
$3rs - 9s - 18st =$	$3s \cdot (r - 3 - 6t)$
$6ax - 8bx + 16cx =$	$2x \cdot (3a - 4b + 8c)$

Level 3:

$6d + 7d^2 =$	$d \cdot (6 + 7d)$
$5x^2 - 10x =$	$5x \cdot (x - 2)$
$8fh^2 + 12hi =$	$4h \cdot (2fh + 3i)$
$-4x^2 - 6xy^2 =$	$-4x \cdot (x + 6y^2)$
$-5a^2b^2 - 5a^2b =$	$-5a^2b \cdot (b + 1)$

$5c^2 + 3cd + 4cf^2 =$	$c \cdot (5c + 3d + 4f^2)$
$8x^2 + 2xy + 10x^3y =$	$2x \cdot (4x + y + 5x^2y)$
$6a^3x - 4a^2y + 8az =$	$2a \cdot (3a^2x - 2ay + 8z)$
$-3rs - 6s^2 - 12st =$	$-3s \cdot (r + 2s + 4t)$
$a^2x^3 - 5bx^2 + 16x^2 =$	$x^2 \cdot (a^2x - 5b + 16)$

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