**Úpravy výrazů - řešení**

7a – 5(a-2)=7a – 5a + 10 = 2a + 10

-2k(4k-1).(-3k)= (-8k2 + 2k).(-3k) = 24k3 – 6k2

3(x+2y) – 2y = 3x + 6y – 2y = 3x + 4y

3ab -2b(a-3) – 6b = 3ab – 2ab + 6b – 6b = ab

5(2x-y) – 4(x-2y) = 10x – 5y – 4x + 8y = 6x + 3y

3(c+d) – 4(c-d) = 3c + 3d – 4c + 4d = -c + 7d

3 + 5(v-1) – 4v = 3 + 5v – 5 – 4v = v - 2

5(m+2n) – (3m-n) . 4 = 5m + 10n – 12m + 4n = -7m + 14n

8(c-d) – 3(c+d) -2(2c-5d) = 8c – 8d – 3c – 3d – 4c + 10d = c -d

(0,2a-0,7b) . 5a – (0,4a+0,6b) . 2b = a – 3,5b – 0,8a – 1,2b = 0,2a – 4,7b

9(m-2) - 2[m – 3(4-2m)] = 9m – 18 – 2 [m – 12 + 6m] = 9m – 18 – 2m + 24 – 12m = -5m + 6

10y - [3(y+1) – 4(y-1)] + 13 = 10y - [3y + 3 – 4y + 4] = 10y – 3y – 3 + 4y – 4 = 11y - 7

(u+4)(u+1) = u2 + u + 4u + 4 = u2 + 5u + 4

(s-3)(s-4) = s2 – 4s – 3s + 12 = s2 – 7s + 12

(2x-4)(x-1) = 2x2 – 2x – 4x + 4 = 2x2 – 6x + 4

(p+5)(p-2) = p2 – 2p + 5p – 10 = p2 + 3p - 10

(0,5+x)(0,1x-2) = 0,05x – 1 + 0,1x2 – 2x = 0,1x2 – 1,95x - 1

3b[2b-3(2b+1) – 4(3-b)] = 3b[2b – 6b – 3 – 12 + 4b] = 3b[-15] = -45b

- 4e[5e – 4(2e-1)] = -4e[5e – 8e + 4] = -20e2 + 32e2 – 16e = 12e2 – 16e

- 2f[3f – 4(1-2f)] + f(3+f) = -2f[3f – 4 + 8f] + 3f + f2 = -6f2 + 8f – 16f2 + 3f + f2 = -21f2 + 11f

(a+3)[(a-2) + (a-4)(a+1)] = (a + 3)[a – 2 + a2 + a – 4a - 4] = (a + 3)[a2 – 2a - 6] =

 = a3 – 2a2 – 6a + 3a2 – 6a – 18 = a3 + a2 – 12a - 18

(a+3) + (a-2)(a-4) + (a+1) = a + 3 + a2 – 4a – 2a + 8 = a2 – 5a + 11