

Faktorisieren von Summen

Lösungen

$$a) 0,7rs - 1,4r = 0,7r(s - 2)$$

$$b) p^2 + 5pq + 2pq = 7pq + p^2 = p(7q + p)$$

$$c) p^2 + 2pq + q^2 = (p + q)^2$$

$$d) 7p^2 + 14pq + 7q^2 = 7(p^2 + 2pq + q^2) = 7(p + q)^2$$

$$e) \frac{14}{3}abc + \frac{10}{3}abd = \frac{2}{3}ab(7c + 5d)$$

$$f) 3,61a^2 - 1,96b^2 = (1,9a + 1,4b)(1,9a - 1,4b)$$

$$g) l^2n^2 - m^2n^2 = (l^2 - m^2)n^2 = (l + n)(l - n)n^2$$

$$h) 4a^3b - 8ab - 4b = (a^3 - 2a - 1)4b$$

$$i) 6rs^2t + 3rs = (2ts + 1)3rs$$

$$j) 2ac^2 - 2abc - ac^2 + ab^2 = ac^2 - 2abc + ab^2 = a(c^2 - 2bc + b^2) = a(c - b)^2$$

$$k) 45x^2 + 120xy + 80y^2 = 5(9x^2 + 24xy + 16y^2)$$

$$l) -2a^2 - (-4b^2)^3 = -4a^2 - 64b^6 = -4a^2 + 64b^6 \\ = 4(16b^6 - a^2) = 4(4b^3 + a)(4b^3 - a)$$