

Lösungen:

		Punkte
1	Bitte berechnen Sie, mit Lösungsweg a) $\frac{\frac{1}{-6} * \frac{-8}{7} * \frac{-3}{2} * \frac{3}{-10} * \frac{1}{10} * \frac{1}{-5} * \frac{-5}{3} * \frac{1}{8}}{\frac{5}{-2} * \frac{10}{9} * \frac{1}{-5} * \frac{-7}{4} * \frac{-2}{7} * \frac{-9}{-4} * \frac{4}{7} * \frac{-7}{6}} \quad \quad L: \quad -\frac{3}{3500}$ b) $\frac{(\frac{7}{9} + \frac{-7}{6}) * (-\frac{-5}{2} - \frac{7}{10})}{(-\frac{-1}{7} - \frac{2}{-9}) * (\frac{-1}{6} + \frac{1}{6})} \quad \quad L: \quad \text{Kein Wert}$	4
2	Bitte kürzen Sie: a) $\frac{35a^2fp^2rx^2 + 42p^2x^2}{70k^2p^2rx^2 + 21p^2x^2}$ L : $\frac{35a^2fp^2rx^2 + 42p^2x^2}{70k^2p^2rx^2 + 21p^2x^2} = \frac{5a^2fr + 6}{10k^2r + 3} [7p^2x^2]$ b) $\frac{4gw^3 - 40gt^2w^2 + 40gp^2w^2y^2}{16gn^2p^2w^2 + 12b^2cgh^2w^2 - 4gw^2}$ L : $\frac{4gw^3 - 40gt^2w^2 + 40gp^2w^2y^2}{16gn^2p^2w^2 + 12b^2cgh^2w^2 - 4gw^2} = \frac{w - 10t^2 + 10p^2y^2}{4n^2p^2 + 3b^2ch^2 - 1} [4gw^2]$	4
3	Bitte berechnen Sie a) $\frac{5,2g + 8,7e}{8v - 5,1} - \frac{1,3w - 7,4}{-7,3p - 1,8}$ L : $\frac{-37,96gp - 9,36g - 63,51ep - 15,66e - 10,4ww + 59,2v + 6,63w - 37,74}{-58,4pv - 14,4v + 37,23p + 9,18}$ b) $\frac{8k - 7}{5m - 8e} - \frac{-p + 4}{-3u - 5}$ L : $\frac{8k - 7}{5m - 8e} - \frac{-p + 4}{-3u - 5} = \frac{-24ku - 40k + 21u + 35 + 5mp - 20m - 8ep + 32e}{-15mu - 25m + 24eu + 40e}$	4

4	Bitte bringen Sie's in die Form $(\square + \square)(\square + \square)$: a) $-bz + 4z + 9b - 36$ L: $(z - 9)(-b + 4)$ b) $15u^2 - u - 6$ L: $(5u + 3)(3u - 2)$ c) $36p^2 - 20p + 45dp - 25d$ L: $(4p + 5d)(9p - 5)$	6
----------	--	---