

Lösungen:

		Punkte
1	<p>Bitte finden Sie die quadratische Ergänzung</p> <p>a) $12,25v^2 - 29,4i^2v$ L: $12,25v^2 - 29,4i^2v + 17,64i^4 = (3,5v - 4,2i^2)^2$</p> <p>b) $x^2 + px$ L: $x^2 + px + 0,25p^2 = (x + 0,5p)^2$;</p> <p>c) $72,25h^4k^4 + 190,4h^2k^2p^2t$ L: $72,25h^4k^4 + 190,4h^2k^2p^2t + 125,44p^4t^2 = (8,5h^2k^2 + 11,2p^2t)^2$</p> <p>d) $\frac{1}{36}v^2 - \frac{5}{8}vf$ L: $\frac{1}{36}v^2 - \frac{5}{8}vf + \frac{225}{64}f^2 = (\frac{1}{6}v - \frac{15}{8}f)^2$</p>	8
2	<p>Bitte berechnen Sie die Unbekannten</p> <p>a) $-6,3(g + 12) - 9,6(g + 4,9) + 11,4 = -38,1$ L: $g = -4,6$</p> <p>b) $((\frac{3}{4}f + \frac{3}{5}) * 11 - \frac{3}{2}f) * (-\frac{3}{8}) + \frac{9}{7}f = -\frac{333}{980}$ L: $f = -\frac{12}{7}$</p> <p>c) $\frac{-\frac{12}{11}}{-\frac{3}{5}p - \frac{11}{2}} + \frac{8}{7} = \frac{103}{77}$ L: $p = \frac{1}{6}$</p>	6
3	<p>Bitte berechnen Sie</p> <p>a) $(\frac{5}{6} : (\frac{10}{11} : \frac{3}{2})) : \frac{3}{5}$ L: $\frac{55}{24}$</p> <p>b) $\frac{5}{2} : ((\frac{3}{4} : \frac{5}{4}) : \frac{5}{6})$ L: $\frac{125}{36}$</p> <p>c) $(\frac{6}{5} : \frac{1}{2}) : (\frac{1}{2} : \frac{4}{5})$ L: $\frac{96}{25}$</p>	6
4	<p>Bitte berechnen Sie</p> <p>a) $\frac{(\frac{1}{-10} - \frac{7}{2} + \frac{8}{5}) * (\frac{-7}{-3} - \frac{-8}{-3} - \frac{-5}{4})}{(\frac{9}{-10} + \frac{-9}{-10} + \frac{3}{5}) * (\frac{7}{4} - \frac{5}{-8} + \frac{-5}{-6})}$ L: $-\frac{20}{21}$</p>	2