

Lösungen:

<p>1</p>	<p>Bitte berechnen Sie</p> <p>a) $(-10d - 8)^2$ L: $100d^2 + 160d + 64$ b) $(-8d + 2p)(-8d - 2p)$ L: $64d^2 - 4p^2$ c) $(10b + 2x)^2$ L: $100b^2 + 40bx + 4x^2$</p> <p>d) $(\frac{3}{2}p + \frac{-7}{9}w)^2$ L: $\frac{9}{4}p^2 - \frac{7}{3}pw + \frac{49}{81}w^2$</p> <p>e) $(\frac{5}{12}o + v)(\frac{5}{12}o - v)$ L: $\frac{25}{144}o^2 - v^2$ f) $(11o + \frac{10}{3}v)^2$ L: $121o^2 + \frac{220}{3}ov + \frac{100}{9}v^2$</p>
<p>2</p>	<p>Bitte berechnen Sie</p> <p>a) $\frac{9}{8} - \frac{-7}{-2} + \frac{2}{3} + \frac{1}{-2}$ L: $\frac{-53}{24}$ b) $\frac{-2}{-5} * \frac{-8}{7} * \frac{5}{-3} * \frac{1}{-2}$ L: $\frac{-8}{21}$ c) $\frac{(-\frac{5}{2} - \frac{5}{-7}) * \frac{3}{-8}}{(-\frac{2}{-3} - \frac{-8}{-7}) * \frac{-10}{-7}}$ L: $\frac{-63}{64}$ d) $\frac{(\frac{5}{-2} + \frac{-6}{-7}) * (\frac{7}{-9} - \frac{7}{-5})}{(-\frac{-10}{9} - \frac{-7}{-4}) * (-\frac{1}{-7} + \frac{-9}{5})}$ L: $\frac{-28}{29}$ e) $\frac{\frac{-7}{9} * \frac{3}{2} * \frac{1}{-10} * \frac{4}{3}}{\frac{5}{-6} * \frac{-1}{-2} * \frac{5}{4} * \frac{-2}{3}}$ L: $\frac{56}{125}$ f) $((\frac{9}{5} : \frac{1}{8}) : \frac{9}{4}) : \frac{1}{2}$ L: $\frac{64}{5}$</p>
<p>3</p>	<p>Bitte kürzen Sie soweit wie möglich</p> <p>a) $\frac{110px + 99xy}{99gx - 132bx + 132ex}$ L: $\frac{10p + 9y}{9g - 12b + 12e}$ [11x] b) $\frac{14du - 63u^2 + 84u}{42u^2 + 56u}$ L: $\frac{2d - 9u + 12}{6u + 8}$ [7u]</p>
<p>4</p>	<p>Bitte erkennen Sie die binomischen Formeln</p> <p>a) $\frac{25}{49}j^2 - \frac{10}{7}ji + i^2$ L: $(\frac{5}{7}j - i)^2$ b) $\frac{9}{64}w^2 - \frac{49}{9}n^2$ L: $(\frac{3}{8}w + \frac{7}{3}n)(\frac{3}{8}w - \frac{7}{3}n)$ c) $g^2 + \frac{5}{2}gt + \frac{25}{16}t^2$ L: $(g + \frac{5}{4}t)^2$</p>