

1.  $(-58a) : (-2) = 29a$
2.  $21rs : 3s = 7r$
3.  $15ac : (-15a) = -c$
4.  $(-35x) : 7x = -5$
5.  $84d : (-6) = -14d$
6.  $(-9ab) : (-9ab) = 1$
7.  $-8cp : (-\frac{1}{2}c) = 16p$
8.  $26z : (-\frac{2}{3}) = 26z \cdot (-\frac{3}{2}) = -39z$
9.  $0.4ad : (-1.4d) = \frac{2}{5}ad : (-\frac{7}{5}d) = \frac{2}{5}a \cdot (-\frac{5}{7}) = -\frac{2}{7}a$
10.  $-19t^2 : (-t) = 19t$
11.  $-105px^2 : 1.5px = -70x$
12.  $-21r^3 : (r^2) = -21r$
13.  $-2ab^3 : (-4ab) = \frac{1}{2}b^2$
14.  $-2ab^3 : (-4ab) = \frac{1}{2}b^2$
15.  $-5c^3d^4 : 5c^2d^2 = -cd^2$
16.  $-42w^5 : (-3w^2) = 14w^3$
17.  $6a^4n^4 : (-\frac{1}{3}a^3n^4) = -18a$
18.  $-x^3y^4z^5 : x^2y^3z^4 = -xyz$
19.  $-\frac{1}{8}mq^4 : (-\frac{7}{2}q^3) = \frac{1}{8} \cdot \frac{2}{7} \cdot mq = \frac{1}{28}mq$
20.  $(8a - 8b) : 8 = 8a : 8 - 8b : 8 = a - b$
21.  $(uv + vw) : v = uv : v + vw : v = u + w$
22.  $(6m + 12n) : 6 = m + 2n$
23.  $(24a - 20) : (-\frac{4}{5}) = (24a - 20) \cdot (-\frac{5}{4}) = -30a + 25$
24.  $(-bt + ct) : (-t) = b - c$
25.  $(15ab - 10a) : 5a = 3b - 2$
26.  $(p^2 - p) : (-p) = -p + 1$
27.  $(14r^2 - 35r) : (-7r) = -2r + 5$
28.  $(8apq - 12bpq) : (-\frac{1}{4}pq) = -32a + 48b$

$$29. (18ab + 27ac - 36ad) : 9a = 2b + 3c - 4d$$

$$30. (10k^2 + 17k - 32) : (-1) = -10k^2 - 17k + 32$$

$$31. (-12at + 20bt - 32ct) : (-4t) = 3a - 5b + 8c$$

$$32. (70x^5y + 25x^4y^3 - 90x^3y^4 - 5x^2y) : (-5x^2y) = -14x^3 - 5x^2y^2 + 18xy^3 + 1$$

$$33. (70x^5y + 25x^4y^3 - 90x^3y^4 - 5x^2y) : (-5x^2y) = -14x^3 - 5x^2y^2 + 18xy^3 + 1$$

$$34. 4x(y + z) : 2x = 2(y + z) = 2y + 2z$$

$$35. -15a^2(s - 3) : 5a = -3a(s - 3) = -3as + 9a$$

$$36. abc(a + b - c) : ab = c(a + b - c) = ac + bc - c^2$$

$$37. p^3(-2p + 1) : (-p) = -p^2(-2p + 1) = 2p^3 - p^2$$

$$38. 6cd^3(u - v) : 3d(u - v) = 2cd^2$$

$$39. (6x^3 - 14x^2 + 17x - 12) : (3x - 4) = 2x^2 - 2x + 3$$

$$\begin{array}{r} (6x^3 - 14x^2 + 17x - 12) \\ - (6x^3 - 8x^2) \\ \hline -6x^2 + 17x \\ - (-6x^2 + 8x) \\ \hline 9x - 12 \\ - (9x - 12) \\ \hline 0 \end{array}$$

$$40. (y^3 - 10y^2 + 16y + 48) : (y - 6) = y^2 - 4y - 8$$

$$\begin{array}{r} (y^3 - 10y^2 + 16y + 48) \\ - (y^3 - 6y^2) \\ \hline -4y^2 + 16y \\ - (-4y^2 + 24y) \\ \hline -8y + 48 \\ - (-8y + 48) \\ \hline 0 \end{array}$$

$$41. (c^3 + 1.5c^2 - 2c - 20) : (2c - 5) = 0.5c^2 + 2c + 4$$

$$\begin{array}{r} (c^3 + 1.5c^2 - 2c - 20) \\ - (c^3 - 2.5c^2) \\ \hline 4c^2 - 2c \\ - (4c^2 - 10c) \\ \hline 8c - 20 \\ - (8c - 20) \\ \hline 0 \end{array}$$

42. Damit es für die Subtraktion der Monome immer einen Minuenden gibt, kann es hilfreich sein, „fehlende“ Monome mit einem Nullkoeffizienten hinzuschreiben.

$$\begin{array}{r}
 (n^4 + 0n^3 + 0n^2 + 5n - 6) : (n + 2) = n^3 - 2n^2 + 4n - 3 \\
 -(n^4 + 2n^3) \\
 \hline
 \phantom{(n^4 + } - 2n^3 + 0n^2 \\
 \phantom{(n^4 + } -(-2n^2 - 4n^2) \\
 \hline
 \phantom{(n^4 + } \phantom{- 2n^3 + } 4n^2 + 5n \\
 \phantom{(n^4 + } \phantom{- 2n^3 + } -(4n^2 + 8n) \\
 \hline
 \phantom{(n^4 + } \phantom{- 2n^3 + } \phantom{4n^2 + } - 3n - 6 \\
 \phantom{(n^4 + } \phantom{- 2n^3 + } \phantom{4n^2 + } -(-3n - 6) \\
 \hline
 \phantom{(n^4 + } \phantom{- 2n^3 + } \phantom{4n^2 + } \phantom{- 3n - 6} 0
 \end{array}$$