Operazioni con i monomi

	semplifica le seguenti espressioni fra monomi	
1	$3ab^2 + 5ab^2 - 7ab^2$	ab^2
2	$11x + 6x - 8x - 3x$	$6x$
3	$12y + 8x^2 + 7x^2 - 12y - 15x^2$	0
4	$7a^2b^2 - 4a^2b^2 + 8ab + 3ab + 5ab + 9a^2b^2 - ab$	$12a^2b^2 + 15ab$
5	$-5a^3b^2 + 7a^3b^2 + 3a^3b^2$	$5a^3b^2$
6	$7ab^2 - 5a^2b + a^2b + 3ab^2$	$10ab^2 - 4a^2b$
7	$4xy - 7xy - xy$	$-4xy$
8	$5x + 3y - [2x - (4y - 3x)]$	$7y$
9	$[2y(a^2 - 6a^2) + (y + 3y) \cdot a^2] : (3a^2)$	$-2y$
10	$[3a^2(-2b) + 2a^2b - 10a^2(-b)](-1,5b)$	$-9a^2b^2$
11	$-3ab^2(-2a^2b) + 4a^3b^3 - (-2a^3b)(-3b^2) - 8a^3b^3$	$-4a^3b^3$
12	$(3a - 4a + 2a)^2 \cdot [3a^2 - 5a \cdot (5a - 4a + 2a)] : (3a^2)$	$-4a^2$
13	$2a(-2ab)^3 - 6(-a^2b)(-a^2b^2) + 5a^4b^3 + 8a^6b^3 : (-2a^2)$	$21a^4b^3$

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14	$-7a^3 + 18a^5 : (-6a^2) - 2a^2(-a) + 3a^3 - 20a^3 : (-4)$	0
15	$(xy^2)^2 + y^2(-3xy) - 5x^2y^4 - xy^2(-4y)$	$-4x^2y^4 + xy^3$
16	$3x(-5x^3) + (-x^2)^2 + (-4x^2)(-2x^2)$	$-6x^4$
17	$x^2b^2(-3x^3b) + 2x^2(-4x^2b)(-xb^2) - (-4x^3b^2)(-x^2b)$	x^5b^3
18	$-2a \cdot (3b^2) + b(-4ab) + 12a^2b^2 : 3a$	$-6ab^2$
19	$15a^7 : (-3a^2) - 3a(+2a^4) - 2a^2(-4a^3) + 6a^5$	$3a^5$
20	$[3x^3y^3 : (-2xy)^2] : (-3xy) + [4x^4y^4 : (-2xy)^3] : (-2xy)$	0
21	$[x^2y^3(-3xy^2)(+5xy) - 3x^3y^2(-xy^4)] : [-2x^3y(+7xy) + 10(-x^2y)^2]$	$3y^4$
22	$-\dfrac{2}{3}xy + \dfrac{3}{4}x^2 - y^2 + \dfrac{1}{2}xy - \dfrac{1}{2}x^2$	$\dfrac{1}{4}x^2 - \dfrac{1}{6}xy - y^2$
23	$\dfrac{1}{6}ax^3 - \dfrac{2}{3}ax^3 + \dfrac{3}{2}ax^3$	ax^3
24	$0{,}5ab^2c - \dfrac{1}{5}ab^2c + 0{,}3ab^2c$	$\dfrac{3}{5}ab^2c$
25	$5bc + \left(\dfrac{3}{4}ab\right) + \left(-\dfrac{1}{2}bc\right) - (-3ab)$	$\dfrac{9}{2}bc + \dfrac{15}{4}ab$

26	$-\dfrac{5}{3}a + a^2 - \left(-\dfrac{1}{3}a - \dfrac{1}{2}a\right) - \dfrac{1}{2}a + \dfrac{1}{2}a^2$	$-\dfrac{4}{3}a + \dfrac{3}{2}a^2$
27	$\left(-\dfrac{7}{24}mn\right) + \left\{\dfrac{7}{3}mn - \left[\dfrac{19}{12}mn - \left(\dfrac{1}{2}mn + mn - \dfrac{3}{8}mn\right)\right]\right\}$	$\dfrac{19}{12}mn$
28	$\dfrac{1}{5}x^2y - \left(\dfrac{1}{3}x^2y^3\right) + \left(-\dfrac{3}{2}x^2y^3\right) - 0,\overline{3}x^2y + \left(-\dfrac{1}{6}x^2y^3\right) - \left(-\dfrac{5}{6}x^2y\right) - \dfrac{1}{2}x^2y^3$	$\dfrac{7}{10}x^2y - \dfrac{5}{2}x^2y^3$
29	$(0,4ab) \cdot \left(-\dfrac{2}{5}a^2b\right)$	$-\dfrac{4}{25}a^3b^2$
30	$a[a^2x - (2a^2x - 3a^2x)] - 3a^2\left(\dfrac{5}{3}ax\right) + 1 + 4a^2x\left(2a - \dfrac{3}{2}a\right)$	$1 - a^3x$
31	$-\dfrac{5}{2}xy^2 \cdot \left(+\dfrac{1}{3}xy\right) \cdot \left(-\dfrac{1}{5}x^2y\right)$	$\dfrac{1}{6}x^4y^4$
32	$\left(\dfrac{8}{7}b^4 - \dfrac{1}{7}b^4 - b^4\right) \cdot (8b - 3b)$	0
33	$-\dfrac{1}{4}x(-2xy)(-8y) - 4xy(-xy) + (-2y)(-2x) - 8\left(-\dfrac{1}{2}x\right)\left(-\dfrac{1}{2}y\right)$	$2xy$
34	$\left[\dfrac{5}{2}m^3n^2 : (-3mn) - \dfrac{5}{3}mn\left(-\dfrac{1}{2}m\right) - \dfrac{1}{3}mn(2n) - 4m^3n^2 : (3m^2)\right]^3$	$-8m^3n^6$
35	$ab^3c \cdot \left(-\dfrac{3}{4}abc^2\right)^2 : \left(\dfrac{1}{2}a^2b^3c^3\right)$	$\dfrac{9}{8}ab^2c^2$

36	$\left[\left(-\dfrac{13}{2}ab + 5ab\right)^3\left(\dfrac{13}{2}ab - 5ab\right)^2 : \left(-\dfrac{3}{2}ab\right)^4\right] \cdot \left(-\dfrac{1}{2}ab\right) - b^2 \cdot \left(3a - \dfrac{1}{2}a\right)^2$	$-\dfrac{11}{2}a^2b^2$
37	$\left(-\dfrac{1}{2}a^2\right)^3 : \left(\dfrac{1}{32}a^5\right) - 2a + 7a^2 + \dfrac{10}{3}a^5 : \left(-\dfrac{2}{3}a^3\right) - \left(-\dfrac{3}{2}a\right)^2 : \left(-\dfrac{3}{4}\right)$	$5a^2 - 6a$
38	$\left(-\dfrac{1}{2}xyz^2\right)\left(-\dfrac{1}{2}xz\right) + \left[\left(-\dfrac{3}{2}xyz^2\right)^2\left(-\dfrac{1}{2}x^2yz^3\right)\right] : \left(+\dfrac{3}{2}xyz^2\right)^2$	$-\dfrac{1}{4}x^2yz^3$
39	$\left[(-y)(-5) + \dfrac{3}{4}xy(-4xy^2) - 5y + 3xy(2xy^2)\right] \cdot \left(-\dfrac{7}{27}xy^2z\right)$	$-\dfrac{7}{9}x^3y^5z$
40	$\left[\left(\dfrac{3}{5}x^2y^2\right)\left(\dfrac{2}{3}x^3y\right)\right]^2 : \left(\dfrac{8}{5}x^8y^5\right) - \left(\dfrac{2}{3}xy - \dfrac{1}{4}xy\right) \cdot (3x^2y) : (-xy)$	$\dfrac{27}{20}x^2y$
41	$-\dfrac{25}{18}a^7 : \left(\dfrac{10}{9}a^4\right) : \dfrac{25}{18} + \left(-\dfrac{15}{4}a^2\right)\left(-\dfrac{3}{5}a\right)$	$\dfrac{27}{20}a^3$
42	$-\dfrac{5}{8}m^3n^5\left(-\dfrac{3}{2}m^3n^4\right) : \left(\dfrac{9}{10}m^5n^6\right) + \dfrac{21}{4}m^5n^7 : \left(-\dfrac{9}{2}m^4n^4\right)$	$-\dfrac{1}{8}mn^3$
43	$\left(\dfrac{1}{3}ab + \dfrac{1}{2}ab + \dfrac{1}{6}ab\right)^4 : (-a^2b^2)^2$	1
44	$-\dfrac{12}{5}a \cdot \left(-\dfrac{3}{4}a^2b^3\right)^2 + \dfrac{2}{15}a^2 \cdot \left(+\dfrac{3}{2}ab^2\right)^3 - \left(-\dfrac{1}{5}a^5b^6\right)$	$-\dfrac{7}{10}a^5b^6$
45	$\left[\dfrac{2}{7}x^5y^7z^9 : \left(\dfrac{3}{14}x^3y^5z^7\right) - \dfrac{1}{3}(-xyz)^2\right]^3 : \left[x^2y^2z^7 : \left(\dfrac{1}{7}x^2yz^6\right)\right]$	$\dfrac{1}{7}x^6y^5z^5$

46	$(ab - 2ab)^{10} \cdot \dfrac{1}{2} + \dfrac{1}{3}[3a^2b^2 - 2(ab)^2]^5 - \left(-\dfrac{1}{2}ab^5\right)^2 \cdot [(-a^2)^2]^2$	$\dfrac{7}{12}a^{10}b^{10}$
47	$\left[\left(-\dfrac{1}{2}xy^2\right)^4 x^5y + \left(-\dfrac{1}{2}x^3y^3\right)^3 + (-x^2y)^3(-xy^2)^3\right] : \left[\left(-\dfrac{1}{4}x^3y^2\right)^2 - x^6y^4\right]$	$-x^3y^5$
48	$\dfrac{1}{2}\{4a^2x^3y - 3a \cdot [4a^5x^7y : (2a^4)x^4]\}^2 : [2x(a^2x)^2 - 3a^4x^3]$	$-2x^3y^2$
49	$\dfrac{2}{3}ab^2\left(-\dfrac{3}{2}\right)a^3b - (3a^2b)a^2b^2$	$-4a^4b^3$
50	$3a^3b(+2ab^4) + \dfrac{1}{3}ab^2\left(-\dfrac{9}{2}a^3b^3\right)$	$\dfrac{9}{2}a^4b^5$
51	$\dfrac{3}{2}abx\left(-\dfrac{8}{3}a^3bx^2\right) + \dfrac{4}{3}a^4x^3\left(-\dfrac{1}{2}b^2\right)$	$-\dfrac{14}{3}a^4b^2x^3$
52	$\dfrac{2}{3}a^2 - b^2 - a^2 - \dfrac{2}{3}a + b^2 + 2b + \dfrac{2}{3}a - \dfrac{3}{5}b$	$-\dfrac{1}{3}a^2 + \dfrac{7}{5}b$
53	$\dfrac{7}{3}a^2b - \left(-\dfrac{1}{2}\right) + \left(-\dfrac{3}{4}a^2b\right) - \left(+\dfrac{1}{3}\right) - (a^2b)$	$\dfrac{7}{12}a^2b + \dfrac{1}{6}$
54	$0,2ab^2 + (-3a^2b) - \left(-\dfrac{1}{2}a\right) - \left(+\dfrac{4}{3}a^2b\right) + (-ab^2) - (+0,5a)$	$-\dfrac{4}{5}ab^2 - \dfrac{13}{3}a^2b$
55	$\dfrac{3}{2}x^2y^4z - 2x^2y^4z + \dfrac{3}{4}x^2y^4z - \dfrac{7}{10}x^2y^4z$	$-\dfrac{9}{20}x^2y^4z$
56	$4mn^2 - (-5ab^3) + \left(-\dfrac{3}{4}\right) + (-9ab^3) - \left(-\dfrac{1}{2}\right) + (-3mn^2) + (-mn^2)$	$-4ab^3 - \dfrac{1}{4}$

57	$\dfrac{2}{3}x - \left(-\dfrac{1}{2}x^2y\right) + 3x^2y + (-x) - (2x^2y) + (-x) - \left(-\dfrac{1}{2}x\right)$	$-\dfrac{5}{6}x + \dfrac{3}{2}x^2y$
58	$\dfrac{3}{4}axy^2 + \left(-\dfrac{1}{2}a^2xy^2\right) + \left(-\dfrac{1}{4}axy^2\right) + \dfrac{2}{5} - (-3a^2xy^2) - 3$	$\dfrac{1}{2}axy^2 + \dfrac{5}{2}a^2xy^2 - \dfrac{13}{5}$
59	$\dfrac{3}{2}xy^3\left(-\dfrac{8}{9}x^2y^4\right) + 2ab^5(-3a^2b) + \dfrac{1}{7}x^3y^5\left(-\dfrac{7}{2}y^2\right)$	$-\dfrac{11}{6}x^3y^7 - 6a^3b^6$
60	$-2m^2n(3mn^4) + \dfrac{1}{3}x^2y^3\left(-\dfrac{1}{3}xy\right) + 2x^3\left(-\dfrac{1}{2}y^4\right) + mn^3(-2m^2n^2)$	$-8m^3n^5 - \dfrac{10}{9}x^3y^4$
61	$-2x\left(\dfrac{1}{2}x^2y\right)(+3xy^2z) - 5x^3(-2y^2z)\left(\dfrac{1}{10}xy\right)$	$-2x^4y^3z$
62	$(-ab^2c)^2 + \dfrac{1}{4}ab^3c^2(ab)$	$\dfrac{5}{4}a^2b^4c^2$
63	$\left(\dfrac{1}{3}bc^2x^2\right)^3\left(\dfrac{1}{2}b^2cx^3\right)^2 + \dfrac{1}{2}b(-b^3c^4x^6)^2$	$\dfrac{55}{108}b^7c^8x^{12}$
64	$(-x^3y^2z)^3 + \dfrac{1}{2}x^2z\left(-\dfrac{4}{3}xy^2\right)$	$-x^9y^6z^3 - \dfrac{2}{3}x^3y^2z$
65	$\dfrac{1}{5}abm\left(\dfrac{1}{3}ab^3\right)^3 + \dfrac{2}{3}b^2m\left(\dfrac{1}{2}a^2b^4\right)^2 + \dfrac{1}{2}b^2m(ab^2)^4$	$\dfrac{91}{135}a^4b^{10}m$
66	$(3abc)^4[(2mnx)^3]^2 + \dfrac{1}{5}a^4b^4x^6(5c^4m^6n^6)$	$5185a^4b^4c^4m^6n^6x^6$

67	$\dfrac{1}{3}b(a^3b)^2 + \left(\dfrac{2}{3}xy^2\right)^3 (a^2m)^3 + \dfrac{2}{5}a^3\left(\dfrac{1}{3}ab\right)^3 + \dfrac{1}{3}am^3x^3y(ay)^5$	$\dfrac{47}{135}a^6b^3 + \dfrac{17}{27}a^6m^3x^3y^6$
68	$(-a^3b^5c^7)^3 - \dfrac{8}{3}ab^3c\left(\dfrac{1}{2}a^2b^3c^5\right)^4 + \dfrac{1}{2}a^3bc^6\left(\dfrac{1}{3}a^3bc^4\right)^5$	$-\dfrac{7}{6}a^9b^{15}c^{21} + \dfrac{1}{486}a^{18}b^6c^{26}$
69	$5a(-2ab)^3 + 2b\left(\dfrac{1}{2}a^2b\right)^2 - (-2ab^2)^2 - 5a^2(-3b^2)^2$	$-\dfrac{79}{2}a^4b^3 - 49a^2b^4$
70	$(a^2b)^3(-2ab^2)^3 - \left(\dfrac{1}{2}a^2b^2\right)^3(-2ab)^3 + \left(\dfrac{3}{2}a^2b^2\right)^4\left(-\dfrac{4}{9}ab\right)$	$-\dfrac{37}{4}a^9b^9$
71	$\dfrac{2}{5}a^2bc^3\left(+\dfrac{5}{4}ab^2c\right) - \dfrac{8}{3}ac^2\left(-\dfrac{1}{4}a^2b^3c^2\right) + 7a^2b^2c^2\left(-\dfrac{1}{7}abc^2\right)$	$\dfrac{1}{6}a^3b^3c^4$
72	$-2 - \dfrac{5}{9}\left(-\dfrac{1}{5}y\right) - \dfrac{3}{2}y - \dfrac{25}{9}\left(-\dfrac{6}{5}y\right) + \dfrac{3}{4} - \dfrac{1}{9}y$	$\dfrac{11}{6}y - \dfrac{5}{4}$
73	$\dfrac{3}{5} + \dfrac{9}{8}x^3:\left(-\dfrac{3}{4}x\right) + \dfrac{1}{2}x - 2 + \dfrac{2}{5}\left(-\dfrac{5}{3}x\right) - \dfrac{3}{4}x^5:\left(-\dfrac{1}{2}x^3\right)$	$-\dfrac{1}{6}x - \dfrac{7}{5}$
74	$\dfrac{2}{5}(-x^2)^2 + y^3 - \dfrac{1}{8}x^6:\left(-\dfrac{5}{4}x^2\right) + \dfrac{3}{2}x\left(-\dfrac{1}{6}x^3\right) - \dfrac{8}{15}y\left(\dfrac{5}{4}y^2\right)$	$\dfrac{1}{4}x^4 + \dfrac{1}{3}y^3$
75	$\left[\left(\dfrac{1}{2}ab^2c^3\right)^2:\left(-\dfrac{3}{2}ab^2c^4\right)\right]3a + \left(-\dfrac{1}{2}abc\right)^2 - a^2b^2c^2$	$-\dfrac{5}{4}a^2b^2c^2$
76	$\left[\left(-\dfrac{2}{3}x\right)^2\right]^2:\left(\dfrac{1}{3}x\right)^3 + \left(-\dfrac{2}{3}y^3 + 5y^5:\dfrac{5}{6}y^2\right):y^2 + \dfrac{2}{3}x$	$6x + \dfrac{16}{3}y$

77	$[7ab + 2a(-4b)]^3 - ab\left(\frac{1}{3}ab\right)^2 - \frac{5}{2}a^2b\left(-\frac{1}{3}ab^2\right)$	$-\frac{5}{18}a^3b^3$
78	$[(-x)^2]^2(-y)^4 : (-xy)^2 + \frac{1}{3}x^2y^4 : (-y)^2 - (3x^3yz)^2 : (x^4z^2)$	$-\frac{23}{3}x^2y^2$
79	$\left[\left(\frac{1}{2}x^4y^3z\right)^0\right]^3 + \frac{1}{2}x^4yz(-3xy)^3 - \frac{5}{4}x^3z(xy)^4$	$1 - \frac{59}{4}x^7y^4z$
80	$\left[\left(-\frac{1}{4}x^2\right) : \frac{1}{4}x\right]^2 : (-2x) + (-2x^2)^2 : (-3x^3)$	$-\frac{11}{6}x$
81	$\left[(ax^6y^8 : axy^3)^3 - \frac{1}{3}(ax^4y^5 : ay)^3\left(\frac{1}{2}x^3y^3\right)\right] : \left(-\frac{5}{6}x^5y^5\right)$	$-x^{10}y^{10}$