

1. Uprav:

- a) $5d+10-5d+(-6)+(-5d) =$
- b) $-2(7s-2)+(2-2s)+6(-s+9) =$
- c) $-4n+10h-(7n+4h)-(-9h+5n) =$
- d) $-3r-(-r-8)-(-6r+4)+(-8) =$
- e) $-(-n+8f)+5(-10f-7n)-(64n-80f):(-8) =$
- f) $(-12h+54x):6+(49h-42x):7-(-7h-4x) =$
- g) $-8z-7z+3z+7z+3z+(-2z)-2z+10z+(-z) =$
- h) $-(-6s)+9t-(-6t)+(-4s)-t+(-7s) =$
- i) $-(3v-6p)+(-8v-8p)+(-4v-7p) =$
- j) $(-6k-5)-(-6k)-(-2+2k) =$
- k) $-(2v+4)+(21v-42):7-7(-9+5v) =$
- l) $(-30+18n):(-6)+(n+9)+(18+10n):(-2) =$
- m) $(-30y-24):3-(-8y-6)-3(9y+2) =$
- n) $2d+(-10d)+10d-(-4d)-(-10d) =$
- o) $(-8w-5y)+(50y+35w):(-5)+(12y-24w):3 =$
- p) $9t-(5m-6t)-(-6m)+(8t+10m) =$
- q) $-4(8u-1)+(-3-7u)-6(-8u+8) =$
- r) $-(-5q)+(-4)+8-9q+(-6) =$
- s) $7(8k-3p)-4(10p-9k)+(-5p-10k) =$
- t) $-(-40u+56d):(-8)+6(10d-u)-(-8d+2u) =$
- u) $7c+(2+9c)-(-10c+8)-4 =$
- v) $-(-9v-3)-(-8v+2)+(7-7v) =$
- w) $(54x-30):(-6)+(-30x-15):(-5)-(-5-8x) =$
- x) $-(-9c+7y)+(-4y-5c)+(9c+8y) =$
- y) $7w+(-8w)-v-3w-9w+(-6v) =$
- z) $(6g-5)+(35g-45):5+8(-6g-9) =$

2. Uprav:

- a) $(8-15g)(-14g+2)=$
- b) $(13-9j)(14c+j)=$
- c) $(-14d+13f)(-15d+10f)=$
- d) $(-14k-13)(4+11k^2)=$
- e) $(14a+7)(14a+14)=$
- f) $(-5-11f^3)(15+10f)=$
- g) $(3g-6)(2+6g)=$
- h) $(6-2q)(15+8q)=$
- i) $(13j+6a)(-3-10a)=$
- j) $(2p+10p^2)(-6p^3+14p)=$
- k) $(9a+4)(-9a-10h)=$
- l) $(13f-15f^2)(-f^2-14f)=$
- m) $(7y+13e)(7e-12y)=$
- n) $(-15f-2)(-13f+15)=$
- o) $(3e^3+12)(8e-12)=$
- p) $(-6e+9n)(-14n-e)=$
- q) $(5+9k^2)(8k+12)=$
- r) $(15b-11z)(b-2z)=$
- s) $(-10+13z)(11+13z)=$
- t) $(-12p-15)(11-3p)=$
- u) $(3-7a)(4s+3a)=$
- v) $(-11m+4a)(-5m-7)=$
- w) $(-8-14f)(13f+6)=$
- x) $(2y+12)(-5y+2m)=$
- y) $(12x+11x^2)(-6x^2-15x)=$
- z) $(6e-12j)(-15+15j)=$

3. Uprav

- a) $(12f^2-6f)^2=$
- b) $(-14q^2+4q)(-2q^2+11q)=$
- c) $(-10h+9)^2=$
- d) $(5+10j)^2=$
- e) $(x-14a)(13-5a)=$
- f) $(12x+g)(-4x+5)=$
- g) $(8w-f^2)^2=$
- h) $(9v^3+2v)(3v^2+14v)=$
- i) $(-2+13m)(-6m^2+10)=$
- j) $(-15h+6)(-15+14h)=$
- k) $(-12z+14r)(10r-10z)=$
- l) $(-8e+6)(8e-2z)=$
- m) $(-7d-9d^2)^2=$
- n) $(7g^2-5b)^2=$
- o) $(7+7t)(-2t-12)=$
- p) $(14e+6j)^2=$
- q) $(8-5g)(-8h-6g)=$
- r) $(2-6c)(13+3c)=$
- s) $(-8z^3+13)(-7z+15)=$
- t) $(11m+1)(6m+15)=$
- u) $(-5j-14)^2=$
- v) $(6m^2+6)(-m-4)=$
- w) $(3r+14e^2)^2=$
- x) $(-15y+2b)^2=$
- y) $(-s+11s^3)(-4s^2+14s)=$
- z) $(3t+9t^2)^2=$

1. Výsledky

- a) $5d+10-5d+(-6)+(-5d) = -5d+4$
b) $-2(7s-2)+(2-2s)+6(-s+9) = -22s+60$
c) $-4n+10h-(7n+4h)-(-9h+5n) = -16n+15h$
d) $-3r-(-r-8)-(-6r+4)+(-8) = 4r-4$
e) $-(-n+8f)+5(-10f-7n)-(64n-80f):(-8) = -26n-68f$
f) $(-12h+54x):6+(49h-42x):7-(-7h-4x) = 7x+12h$
g) $-8z-7z+3z+7z+3z+(-2z)-2z+10z+(-z) = 3z$
h) $-(-6s)+9t-(-6t)+(-4s)-t+(-7s) = -5s+14t$
i) $-(3v-6p)+(-8v-8p)+(-4v-7p) = -15v-9p$
j) $(-6k-5)-(-6-k)-(-2+2k) = -7k-1$
k) $-(2v+4)+(21v-42):7-7(-9+5v) = -34v+53$
l) $(-30+18n):(-6)+(n+9)+(18+10n):(-2) = -7n+5$
m) $(-30y-24):3-(-8y-6)-3(9y+2) = -29y-8$
n) $2d+(-10d)+10d-(-4d)-(-10d) = 16d$
o) $(-8w-5y)+(50y+35w):(-5)+(12y-24w):3 = -11y-23w$
p) $9t-(5m-6t)-(-6m)+(8t+10m) = 23t+11m$
q) $-4(8u-1)+(-3-7u)-6(-8u+8) = 9u-47$
r) $-(-5q)+(-4)+8-9q+(-6) = -4q-2$
s) $7(8k-3p)-4(10p-9k)+(-5p-10k) = 82k-66p$
t) $(-40u+56d):(-8)+6(10d-u)-(-8d+2u) = 75d-3u$
u) $7c+(2+9c)-(-10c+8)-4 = 6c-10$
v) $-(-9v-3)-(-8v+2)+(7-7v) = 10v+8$
w) $(54x-30):(-6)+(-30x-15):(-5)-(-5-8x) = 5x+3$
x) $(-9c+7y)+(-4y-5c)+(9c+8y) = -3y-5c$
y) $7w+(-8w)-v-3w-9w+(-6v) = -13w-7v$
z) $(6g-5)+(35g-45):5+8(-6g-9) = -35g-86$

2. Výsledky

- a) $(8-15g)(-14g+2)=210g^2-142g+16$
b) $(13-9j)(14c+j)=-9j^2-126jc+13j+182c$
c) $(-14d+13f)(-15d+10f)=210d^2+130f^2-335df$
d) $(-14k-13)(4+11k^2)=-154k^3-143k^2-56k-52$
e) $(14a+7)(14a+14)=196a^2+294a+98$
f) $(-5-11f^3)(15+10f)=-110f^4-165f^3-50f-75$
g) $(3g-6)(2+6g)=18g^2-30g-12$
h) $(6-2q)(15+8q)=-16q^2+18q+90$
i) $(13j+6a)(-3-10a)=-60a^2-130aj-18a-39j$
j) $(2p+10p^2)(-6p^3+14p)=-60p^5-12p^4+140p^3+28p^2$
k) $(9a+4)(-9a-10h)=-81a^2-90ah-36a-40h$
l) $(13f-15f^2)(-f^2-14f)=15f^4+197f^3-182f^2$
m) $(7y+13e)(7e-12y)=-84y^2+91e^2-107ye$
n) $(-15f-2)(-13f+15)=195f^2-199f-30$
o) $(3e^3+12)(8e-12)=24e^4-36e^3+96e-144$
p) $(-6e+9n)(-14n-e)=6e^2-126n^2+75en$
q) $(5+9k^2)(8k+12)=72k^3+108k^2+40k+60$
r) $(15b-11z)(b-2z)=15b^2+22z^2-41bz$
s) $(-10+13z)(11+13z)=169z^2+13z-110$
t) $(-12p-15)(11-3p)=36p^2-87p-165$
u) $(3-7a)(4s+3a)=-21a^2-28as+9a+12s$
v) $(-11m+4a)(-5m-7)=55m^2-20ma+77m-28a$
w) $(-8-14f)(13f+6)=-182f^2-188f-48$
x) $(2y+12)(-5y+2m)=-10y^2+4ym-60y+24m$
y) $(12x+11x^2)(-6x^2-15x)=-66x^4-237x^3-180x^2$
z) $(6e-12j)(-15+15j)=-180j^2+90je+180j-90e$

3. Výsledky

- a) $(12f^2-6f)^2=144f^4-144f^3+36f^2$
b) $(-14q^2+4q)(-2q^2+11q)=28q^4-162q^3+44q^2$
c) $(-10h+9)^2=100h^2-180h+81$
d) $(5+10j)^2=100j^2+100j+25$
e) $(x-14a)(13-5a)=70a^2-5ax-182a+13x$
f) $(12x+g)(-4x+5)=-48x^2-4xg+60x+5g$
g) $(8w-f^2)^2=f^4-16f^2w+64w^2$
h) $(9v^3+2v)(3v^2+14v)=27v^5+126v^4+6v^3+28v^2$
i) $(-2+13m)(-6m^2+10)=-78m^3+12m^2+130m-20$
j) $(-15h+6)(-15+14h)=-210h^2+309h-90$
k) $(-12z+14r)(10r-10z)=120z^2+140r^2-260zr$
l) $(-8e+6)(8e-2z)=-64e^2+16ez+48e-12z$
m) $(-7d-9d^2)^2=81d^4+126d^3+49d^2$
n) $(7g^2-5b)^2=49g^4-70g^2b+25b^2$
o) $(7+7t)(-2t-12)=-14t^2-98t-84$
p) $(14e+6j)^2=196e^2+36j^2+168ej$
q) $(8-5g)(-8h-6g)=30g^2+40gh-48g-64h$
r) $(2-6c)(13+3c)=-18c^2-72c+26$
s) $(-8z^3+13)(-7z+15)=56z^4-120z^3-91z+195$
t) $(11m+1)(6m+15)=66m^2+171m+15$
u) $(-5j-14)^2=25j^2+140j+196$
v) $(6m^2+6)(-m-4)=-6m^3-24m^2-6m-24$
w) $(3r+14e^2)^2=196e^4+84e^2r+9r^2$
x) $(-15y+2b)^2=225y^2+4b^2-60yb$
y) $(-s+11s^3)(-4s^2+14s)=-44s^5+154s^4+4s^3-14s^2$
z) $(3t+9t^2)^2=81t^4+54t^3+9t^2$