(Obyčejná) sbírka

na

všemožné soustavy rovnic

1. $\begin{cases} 4x+3y=6 \\ 2x+y=4 \end{cases}$

2. $\begin{cases} 3x-5y=14 \\ 6x-10y=17 \end{cases}$

3. $\begin{cases} y+\frac{1}{3}x=2 \\ \frac{y}{2}+\frac{x}{6}=1 \end{cases}$

4. $\begin{cases} \frac{x+1}{3}-\frac{y+2}{4}=\frac{2(x-y)}{5} \\ \frac{x-3}{4}-\frac{y-3}{3}=2y-x \end{cases}$

5. $\begin{cases} \frac{x\sqrt{2}}{\sqrt{2}-1}-\frac{y}{\sqrt{2}+1}=5-\sqrt{2} \\ \frac{x}{\sqrt{2}+2}+\frac{y}{\sqrt{2}-2}=\frac{-8-\sqrt{2}}{2} \end{cases}$

6. $\begin{cases} \sqrt{3}x+\sqrt{2}y=1 \\ \sqrt{2}x+\sqrt{3}y=2 \end{cases}$

7. $\begin{cases} \frac{4}{x-3y}=\frac{7}{9x+2y} \\ \frac{3}{2x+y}=\frac{9}{x-y+1} \end{cases}$

8. $\begin{cases} \frac{2x-5}{x-4}-\frac{y+1}{y-2}=1 \\ \frac{3x+1}{x-1}-\frac{2y+9}{y+2}=1 \end{cases}$

9. $\begin{cases} x+3\lvert y\rvert-1=0 \\ x+y+3=0 \end{cases}$

10. $\begin{cases} x+y=2 \\ \lvert 3x-y\rvert=1 \end{cases}$

11. $\begin{cases} x^2+y^2=100 \\ 3x+4y=50 \end{cases}$

12. $\begin{cases} x^2+y^2=4 \\ x+2y=4 \end{cases}$

13. $\begin{cases} x^2+9y^2=36 \\ 2x-3y=0 \end{cases}$

14. $\begin{cases} x^2+xy-6y^2=0 \\ 3x-2y=6 \end{cases}$

15. $\begin{cases} 16y^2-40xy+25x^2=0 \\ 4y-5x=10 \end{cases}$

16. $\begin{cases} 3x^2+3y^2-26x-16y=-61 \\ x-y=-1 \end{cases}$

17. $\begin{cases} x^2+y^2=421 \\ xy=210 \end{cases}$

18. $\begin{cases} \frac{x}{y}+\frac{y}{x}=\frac{41}{20} \\ xy=20 \end{cases}$

19. $\begin{cases} x+xy=60 \\ y+xy=55 \end{cases}$

20. $\begin{cases} (x-1)(y+5)=100 \\ (x-2)(y+6)=99 \end{cases}$

21. $\begin{cases} x^2+y^2+x+y=36 \\ 3x^2+3y^2+4x+5y=117 \end{cases}$

⋆ **22.** $\begin{cases} x^2+y^2+x+y=68 \\ 2xy+x+y=52 \end{cases}$

Výsledky

1. $\{[3;-2]\}$

2. $\emptyset$

3. $\left\{\left[x;-\frac{1}{3}x+2\right] \mid x \in \mathbb{R}\right\}$

4. $\{[11;6]\}$

5. $\left\{[\sqrt{2};3]\right\}$

6. $\left\{[\sqrt{3}-2\sqrt{2};2\sqrt{3}-\sqrt{2}]\right\}$

7. $\{[1;-1]\}$

8. $\{[5;3]\}$

9. $\{[-5;2];[-2;-1]\}$

10. $\left\{[\frac{1}{4};\frac{7}{4}];[\frac{3}{4};\frac{5}{4}]\right\}$

11. $\{[6;8]\}$

12. $\left\{[0;2];[\frac{8}{5};\frac{6}{5}]\right\}$

13. $\left\{\left[\frac{6\sqrt{5}}{5};\frac{4\sqrt{5}}{5}\right];\left[-\frac{6\sqrt{5}}{5};-\frac{4\sqrt{5}}{5}\right]\right\}$

14. $\left\{\left[3;\frac{3}{2}\right];\left[\frac{18}{11};-\frac{6}{11}\right]\right\}$

15. $\emptyset$

16. $\{[4;5];[2;3]\}$

17. $\{[15;14];[-15;-14];[14;15];[-14;-15]\}$

18. $\{[5;4];[-5;-4];[4;5];[-4;-5]\}$

19. $\{[10;5];[-6;-11]\}$

20. $\{[11;5];[-9;-15]\}$

21. $\left\{[5;2];\left[-\frac{9}{5};\frac{27}{5}\right]\right\}$

22. $\{[3;7];[7;3];[-4;-8];[-8;-4]\}$