Úlohy na úpravu λ-matice

14.

$$
\begin{aligned}
5z' - 2y' + 4z - y &= e^{-t}, \\
z' + 8z - 3y &= 5e^{-t}.
\end{aligned}
$$

15.

$$
\begin{aligned}
z'' + y' + z &= e^{t}, \\
z' + y'' &= 1.
\end{aligned}
$$

16.

$$
\begin{aligned}
x' &= 5x + y - z, \\
y' &= x + 3y + z, \\
z' &= 7x + 3y + z.
\end{aligned}
$$

17.

$$
\begin{aligned}
x' &= x - 6y + 3z, \\
y' &= -8y + 6z, \\
z' &= 3x - 12y + 7z.
\end{aligned}
$$

18.

$$
\begin{aligned}
x' &= 7x - 10y - 4z, \\
y' &= 4x - 7y - 4z, \\
z' &= -6x + 7y + z.
\end{aligned}
$$

19.

$$
\begin{aligned}
x' &= 6x - 7y + 4z, \\
y' &= x + z, \\
z' &= -2x + 3y.
\end{aligned}
$$

20.

$$
\begin{aligned}
x' &= 2x - y + z + \cos t, \\
y' &= 5x - 4y + 3z + \sin t, \\
z' &= 4x - 4y + 3z + 2\sin t - 2\cos t.
\end{aligned}
$$

21.

$$\begin{aligned}
x' &= x - 2y - z - 2e^t, \\
y' &= -x + y + z + 2e^t, \\
z' &= x - z - e^t.
\end{aligned}$$

22.

$$\begin{aligned}
x' &= 2x - 3y + t, \\
y' &= x - 2z - 3t^2, \\
z' &= -y + 2z + 3t - 2.
\end{aligned}$$

23.

$$\begin{aligned}
x' &= 2x + y + e^{2t}, \\
y' &= 2y + 4z - 4e^{-t}, \\
z' &= x - z, \\
x(0) &= 0, y(0) = -1, z(0) = 1.
\end{aligned}$$