

Úlohy k řešení pomocí vlastních vektorů matice

24.

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

25.

$$\begin{aligned}x' &= 2x + 2y - 2z, \\y' &= 2x + 5y - 4z, \\z' &= -2x - 4y + 5z.\end{aligned}$$

26.

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

27.

$$\begin{aligned}x' &= 5x - y + 2z, \\y' &= -x + 3y - z, \\z' &= -4x + 2y - z.\end{aligned}$$

28.

$$\begin{aligned}x' &= x + 2y + 3z \\y' &= 2x + 4y + 6z \\z' &= 3x + 6y + 9z\end{aligned}$$

29.

$$\begin{aligned}x' &= y - z \\y' &= -y + z \\z' &= x - z\end{aligned}$$

30.

$$\begin{aligned}x' &= -3x + z \\y' &= -3y + 2z \\z' &= 3x - 2y - 3z\end{aligned}$$

31.

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