

SBÍRKA SOUSTAV

Řešte nad  $\mathbb{C}$ :

(1)

$$\left( \begin{array}{ccc|c} -2+3i & 1+3i & -3+3i & -3-6i \\ 2+2i & 3-i & 3-i & -8+6i \\ 3-i & -2-2i & 2-i & 7+8i \end{array} \right)$$

(2)

$$\left( \begin{array}{cc|c} -2-2i & -3i & -2-2i \\ 2-i & 3+i & 4-2i \end{array} \right)$$

(3)

$$\left( \begin{array}{cc|c} -3+i & -1+i & 4-10i \\ 2i & 1+3i & -8-6i \end{array} \right)$$

(4)

$$\left( \begin{array}{cc|c} -1-2i & -2+i & -6+8i \\ -2-2i & -1-3i & -12 \end{array} \right)$$

(5)

$$\left( \begin{array}{cc|c} -2-2i & 1+i & -7+9i \\ -2-3i & -2+2i & -3+2i \end{array} \right)$$

(6)

$$\left( \begin{array}{cc|c} -1-2i & 2-i & 2+4i \\ 2-2i & -1-2i & 11-i \end{array} \right)$$

(7)

$$\left( \begin{array}{cc|c} 1+i & -2 & 0 \\ 2+i & 2+i & -5+5i \end{array} \right)$$

(8)

$$\left( \begin{array}{cc|c} -1+2i & 1-2i & 14-8i \\ 1+2i & 3 & 10-2i \end{array} \right)$$

(9)

$$\left( \begin{array}{cc|c} -2i & -3-2i & -10 \\ -2-i & -1-3i & -10-5i \end{array} \right)$$

(10)

$$\left( \begin{array}{cc|c} -2-2i & -1-3i & -4-14i \\ -3i & 1+i & 2-2i \end{array} \right)$$

(11)

$$\left( \begin{array}{cc|c} -2 & -1+2i & 4+5i \\ -1+3i & -2-i & 8+17i \end{array} \right)$$

(12)

$$\left( \begin{array}{ccc|c} -1-i & 2-2i & -i & 6-4i \\ -1-i & 2-2i & 1+i & 9-3i \\ 1-i & 1 & 2-i & 4-i \end{array} \right)$$

(13)

$$\left( \begin{array}{ccc|c} 1-2i & -2-2i & 1+i & -3+6i \\ 1+i & 1+2i & 0 & 5-7i \\ -2i & -2 & -i & 1+i \end{array} \right)$$

$$(14) \quad \left( \begin{array}{ccc|c} -1+2i & 2-i & -2+i & 3+4i \\ 2-i & -1+i & -2+2i & 3 \\ 2 & 1+2i & 2-2i & -8+4i \end{array} \right)$$

$$(15) \quad \left( \begin{array}{ccc|c} 1-2i & -2 & -2+i & 2+6i \\ 1+i & 2-2i & -2+i & -13-i \\ i & -2i & -2-2i & -5-i \end{array} \right)$$

$$(16) \quad \left( \begin{array}{ccc|c} -2+2i & 2+2i & -2-2i & 10+2i \\ -2-2i & 2-i & -1-i & 1+4i \\ -1+2i & -1-2i & -1-2i & -1-6i \end{array} \right)$$

$$(17) \quad \left( \begin{array}{ccc|c} 2+2i & 1+i & -2-2i & 3-5i \\ -1-i & -2+i & -1+i & -4+5i \\ 1-i & -1-2i & -2+2i & -10+i \end{array} \right)$$

$$(18) \quad \left( \begin{array}{ccc|c} -1-i & 0 & 1-2i & 3+2i \\ 2+i & -1-i & -2+i & 4-i \\ -2+2i & -1+2i & -2-2i & 2-7i \end{array} \right)$$

$$(19) \quad \left( \begin{array}{ccc|c} -1+2i & -2+i & 1+i & 4+8i \\ 2+2i & 1-i & 0 & 5+i \\ 1-i & 2-i & 1+2i & 4-2i \end{array} \right)$$

$$(20) \quad \left( \begin{array}{ccc|c} -2+2i & -2 & 1 & -6-11i \\ 2-2i & 1-2i & -1-i & 5+8i \\ 2-2i & 2+2i & -2+2i & 8+12i \end{array} \right)$$

$$(21) \quad \left( \begin{array}{ccc|c} 1 & 2+i & 1+2i & -4+8i \\ 1+i & 1-i & 1+i & 8i \\ 1-2i & 2+2i & 2-2i & 7-i \end{array} \right)$$

**Řešení:**

- (1)  $(2+i, -2-i, -1)$
- (2)  $(-2, 2-2i)$
- (3)  $(-2+2i, -1+i)$
- (4)  $(-2i, 2-2i)$
- (5)  $(-2-3i, -3+2i)$
- (6)  $(1+i, -1+3i)$
- (7)  $(2i, -1+i)$
- (8)  $(-3-2i, 3+2i)$
- (9)  $(1, 2-2i)$
- (10)  $(2, 3+i)$
- (11)  $(2-3i, -2-3i)$
- (12)  $(i, 2+i, 1-i)$
- (13)  $(1-2i, -2-2i, 1+i)$

- (14)  $(i, 2i, -1 - i)$
- (15)  $(-1 + i, -2 - 2i, 1 + i)$
- (16)  $(-2 - 2i, 2 - i, 1 - i)$
- (17)  $(1, 1 - 2i, 2 + i)$
- (18)  $(1 + i, -2 + i, -1 + 2i)$
- (19)  $(2 - i, -i, 2 - i)$
- (20)  $(-2 + 2i, 2 + i, -2 - i)$
- (21)  $(1 + i, -1 + i, 2 + 2i)$