Exercise set 2.2

Solving systems of equations using matrices

Here are some problems for you to try your hand at.

1. Use matrices to solve the system of equations:

$$x - 3y = 7$$
$$-3x + 4y = -1$$

2. Use matrices to solve the system of equations:

$$2x + 1 - 3y = -2y - 1$$
$$3x - y + 4 = 5 + 2x$$

3. Use matrices to solve the system of equations:

$$3x - 6y + 9z = 0$$
$$4x - 6y + 8z = -4$$
$$-2x - y + z = 7$$

4. Use matrices to solve the system of equations:

$$3x + 2y + 4z = 600$$
$$2x + y + z = 275$$
$$6x + 6y + 2z = 1150$$

5. Use matrices to solve the system of equations:

$$3x - 3y = -12 - 15z$$
$$8z = -5 + y - 2x$$
$$-x + 3y - 8 = +8z$$