

Matrix algebra – addition and multiplication

Exercise 2.8

- If $x + 0 = 0$, what do you know about the components of x
- If $0x = 0$, what do you know about the components of x ?
- Solve the vector equation $4x - 7a = 2x + 8b - a$ for x in terms of vectors a and b .

Solution Exercise 2.8

- All components of x are 0 if $x + 0 = 0$.
- Nothing is known about the components of x if $0x = x$.
- $4x - 7a = 2x + 8b - a$
 $2x = 8b + 6a$
 $x = 4b + 3a$