import numpy as np
a = np.array([1, 2, 3])
b = np.array([4, 5, 6])
x = 3 * b + a

After above the code executes what is the value of x?

A. 13  
B. np.array([13, 17, 21])  
C. np.array([15, 21, 27])  
D. np.array([7, 7, 9])

Answer: B
3*b is np.array([12, 15, 18]) and the addition is element-wise so the result is np.array([13, 17, 21])
import numpy as np
a = np.array([1, 2, 3])
b = np.array([4, 5, 6])
x = np.sum(np.power(b-a, 2))

After above the code executes what is the value of $x$?

A. 13  
B. 21  
C. 27  
D. np.array([27, 27, 27])

Answer: C 
b-a is np.array([3, 3, 3]) thus the element-wise power operation produces np.array([9, 9, 9]). The resulting sum of that vector is the scalar 27.