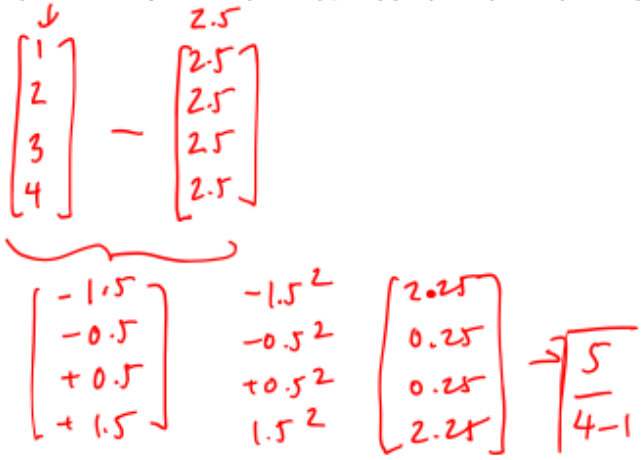
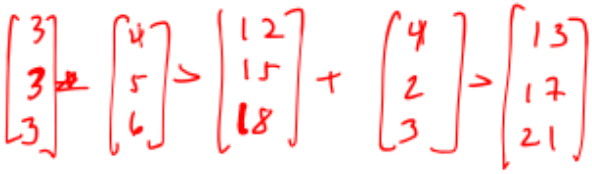
```
data = np.array([1.0, 2.0, 3.0, 4.0])
math.sqrt(np.sum(np.power(data - np.mean(data), 2))/(len(data) - 1))
```



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

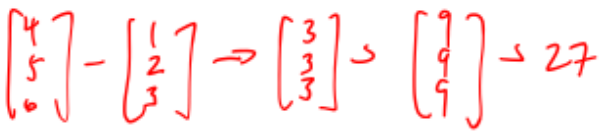


After above the code executes what is the value of x?

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.