In [1]:
```python
x=[162,212,220,206,152,183,167,175,156,186,183,163,163,172,194,168,161,164,188,18
y=[68.78,74.11,71.73,69.88,67.25,68.78,68.34,67.01,63.45,71.19,67.19,65.80,64.30,
```

In [4]:
```python
import numpy as np
import matplotlib.pyplot as plt
```

In [5]:
```python
n=len(y)
n
```

Out[5]: 30

In [6]:
```python
x=np.array(x)
y=np.array(y)
y
```
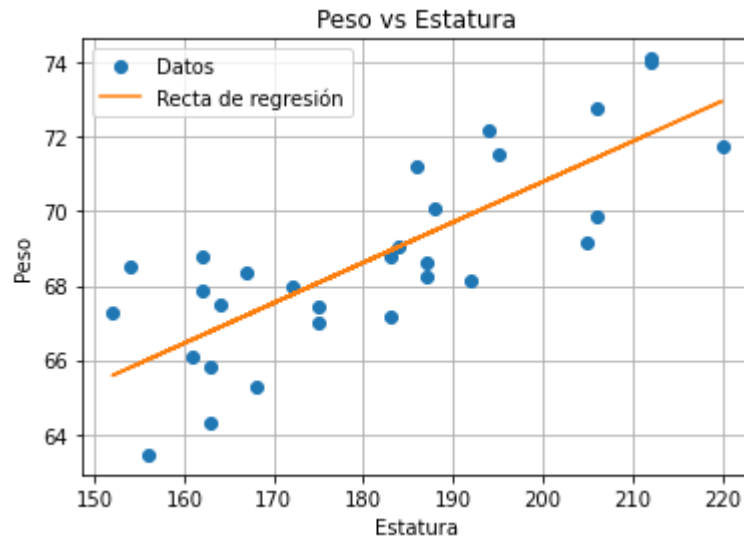
Out[6]:
```
array([68.78, 74.11, 71.73, 69.88, 67.25, 68.78, 68.34, 67.01, 63.45,
       71.19, 67.19, 65.8 , 64.3 , 67.97, 72.18, 65.27, 66.09, 67.51,
       70.1 , 68.25, 67.89, 68.14, 69.08, 72.8 , 67.42, 68.49, 68.61,
       74.03, 71.52, 69.18])
```

In [10]:
```python
sumx=sum(x)
sumy=sum(y)
sumx2=sum(x**2)
sumy2=sum(y**2)
sumxy=sum(x*y)

promx=sumx/n
promy=sumy/n
```

In [11]:
```python
m=(sumx*sumy - sumxy*n)/(sumx**2 - n*sumx2)
b=promy - m*promx

m,b
```

Out[11]: (0.10861078195357493, 49.07163369547579)

In [12]:
```python
plt.plot(x,y, 'o', label='Datos')
plt.plot(x, m*x + b, label='Recta de regresión')
plt.xlabel('Estatura')
plt.ylabel('Peso')
plt.title('Peso vs Estatura')
plt.grid()
plt.legend()
plt.show()
```

In [ ]: