

## Computing the sample variance and sample standard deviation

**Step 1:**

1.  $99^2 = 9801$
2.  $98^2 = 9604$
3.  $97^2 = 9409$
4.  $96^2 = 9216$
5.  $95^2 = 9025$
6.  $94^2 = 8836$
7.  $90^2 = 8100$
8.  $89^2 = 7921$
9.  $87^2 = 7569$
10.  $86^2 = 7396$
11.  $84^2 = 7056$
12.  $83^2 = 6889$
13.  $79^2 = 6241$
14.  $78^2 = 6084$
15.  $75^2 = 5625$

**Step 2:**

$$9801+9604+9409+9216+9025+8836+8100+7921+7569+7396+7056+6889+6241+6084+5625= 118772$$

**Step 3:**  $99+98+97+96+95+94+90+89+87+86+84+83+79+78+75=1330$

**Step 4:**  $(1330)^2 = 1768900$

**Step 5:**  $1768900/15 = 117926.67$

**Step 6:**  $118772 - 117926.67 = 795.33$

**Step 7:**  $795.33/15 = 53.022$

$$\sqrt{53.022} = 7.28$$