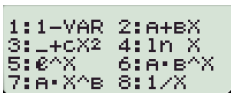
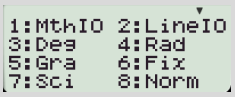
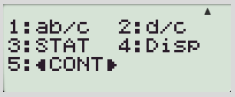
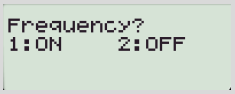
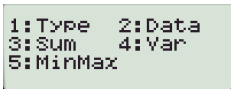
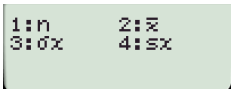
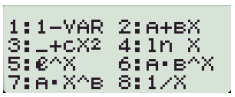
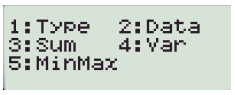
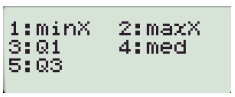
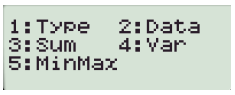
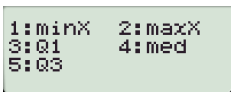
Calculating the mean

Calculator steps for a CASIO fx-82 AU PLUS II

Enter the statistics mode of the scientific calculator.	MODE 2	**2:STAT**	
Select	1	**1:1-VAR**	
Turning on the Frequency column			
If there is no Frequency column:	SHIFT MODE (SETUP)		
	▼		
	3	**3: STAT**	
	1	**1: ON**	
Enter the data.			
			
Calculating the mean			
Press AC	AC		
Then analyse STAT data.	SHIFT 1		
	4	**4:Var**	
Choose $\bar{x}$	2 =	**2:** $\bar{x}$	
			

Calculating the median and quartiles

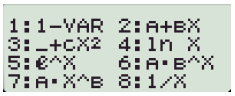
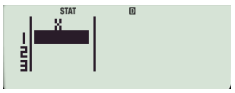
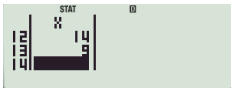
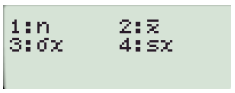
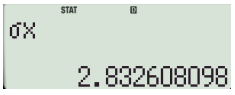
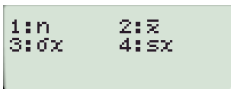
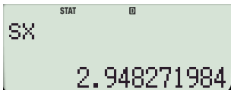
Calculator steps for a CASIO fx-82 AU PLUS II

Enter the statistics mode of the scientific calculator.	MODE 2	**2:STAT**	
Select	1	**1:1-VAR**	
Turning on the Frequency column	ⓘ see instructions for calculating the mean		
Enter the data.			
			
Calculating the median			
Press AC	AC		
Then analyse STAT data.	SHIFT 1		
	6	**6:MinMax**	
Choose med	4 =	**4:med**	
			
Calculating the quartiles			
Press AC	AC		
Then analyse STAT data.	SHIFT 1		
	6	**6:MinMax**	
Choose Q1 for the lower quartile or Q3 for the upper quartile	3 = 5 =	**3:Q1** **5:Q3**	
			

Calculating the standard deviation

Calculator steps for a CASIO fx-82 AU PLUS II

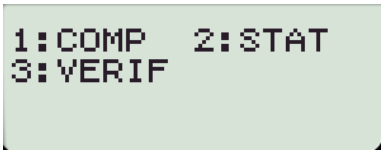
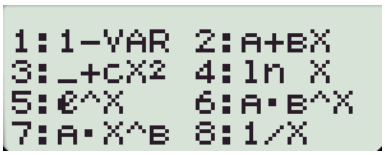
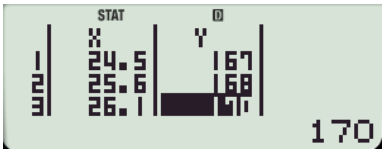
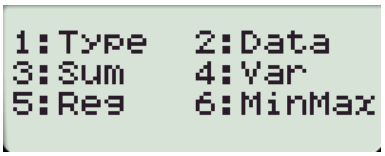
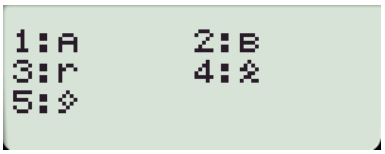
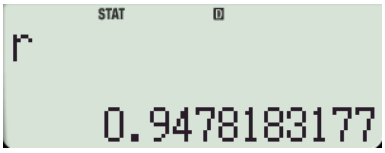
Example data set: 12, 17, 16, 9, 11, 12, 14, 16, 11, 10, 8, 14, 9

Enter the statistics mode of the scientific calculator.	MODE 2	**2:STAT**	
Select	1	**1:1-VAR**	
Enter the data.			
			
*Calculating the **population** standard deviation*			
Press AC	AC		
Then analyse STAT data.	SHIFT 1		
	4	**4:Var**	
Choose σx	3 =	**3:** σx	
			
*Calculating the **sample** standard deviation*			
Press AC	AC		
Then analyse STAT data.	SHIFT 1		
	4	**4:Var**	
Choose sx	4 =	**4:sx**	
			

Calculating the correlation coefficient

see also gomaths.net/4297

Calculator steps for a CASIO fx-82 AU PLUS II

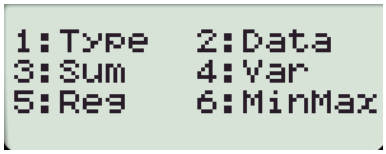
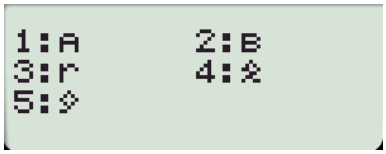
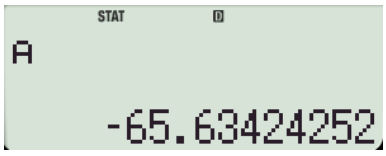
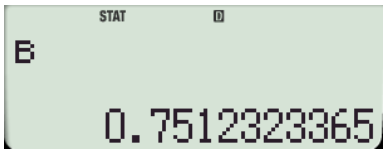
Enter the statistics mode of the scientific calculator.	MODE 2	2:STAT	
Select	2	2:A+BX	
Enter the data.			
Press AC	AC		
Then analyse STAT data.			
	5	5:Reg	
Choose *r*	3 =	3:r	
			

Determing the line of best fit

see also gomaths.net/4297

(gradient and *y*-intercept)

Calculator steps for a CASIO fx-82 AU PLUS II

Enter the STAT options.	SHIFT 1		
Choose **5:Reg** for 'Regression'.	5	**5:Reg**	
The calculator represents the straight line as **A+BX** where **A** is the *y*-intercept and **B** is the gradient.			
Determine the *y*-intercept. **A = −65.63**	1 =	**1:A**	
Determine the gradient. **B = 0.75**	SHIFT 1 5 2 =	**STAT** **5:Reg** **2:B**	

Using the gradient-intercept formula, the line is: $y = mx + c$

Substitute A for c and B for m $y = Bx + A$

$$y = \mathbf{0.75}x - \mathbf{65.63}$$