

= SREGR = Copyright (c) 1984, Wildfire Technology Inc. =

- SIMPLE LINEAR REGRESSION WORKSHEET -

= = = =

Regression Line is $Y =$ #DIV/0! $+ X *$

Correlation Coefficient (r) is

r-squared is

Significance Test of Regression:
(Testing the hypothesis that the slope is zero.)

Student's t-statistic

Number of Degrees of Freedom

Intermediate Results Area

Number of Observations

Mean Value of X

Mean Value of Y

Mean Value of (X*Y)

Corrected Sum of Squares of X

Corrected Sum of Squares of Y

Corrected Sum of Cross-Products (X*Y)

Variance of X

Variance of Y

Unexplained Variance of Y, Given X

Standard Deviation of Y, Given X

Standard Deviation of Slope (b)

DATA INPUT AREA
Enter Pairs of Values Below

| Observation Number | Y-Value | X-Value | Y-Estimate #DIV/0! |
|-----------------------|---------|---------|-----------------------|
|-----------------------|---------|---------|-----------------------|

```

=          \0: \B:                                TEMP:                0
          /dfobsnos~1~~~                          {esc} {esc} {esc} {esc} {esc}
-          /ruinputarea~/wgpe                      {esc} {esc} {esc} {esc} {esc}
          {home}/xmmenu~                            {home}/ruinputarea~/xmmenu
=

```

MENU:

```

#DIV/O!Input      Blank      Calc      Results
      Input Data   Clear Input File Calculate Resu Show Results
#DIV/O!/xminptmenu~/xmblank~/ /xgcalc~/ /xmresults~/
#DIV/O!

```

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BLANK:

```

No          Yes
#DIV/O!Leave Data IntErase All X-Y Data Values.
0/xmmenu~/ /reinputarea~/
          /xmmenu~/

```

INPTMENU:

```

XYPairs      YXPairs      Est-X      Range
Enter Data in XEnter Data in YEnter X-ValueUse Standard 'l
/ruinstr~/cinpu/ruinstr~/cinpu/ruinstr~/cinpu/ruinstr~/cinpu
{goto} temp~@{goto} temp~@{goto} temp~@/riinputarea~
1 {home} {pgdn}{home} {pgdn}{home} {pgdn}/xminptmenu~
/xitemp=2~{en/xitemp=2~{en/xitemp=2~{end} {down}
#DIV/O!/xitemp>0~{dc/xitemp>0~{dc/xitemp>0~{down}
#DIV/O!{right}      {?} {right} {?} {{right}
#DIV/O! {?} {left} {?} {r/xgg27~      {?} {down}/xgh28~

```

#DIV/O!CALC:

```

#DIV/O!/xi@count(b46.b48)<3~/xlInsufficient Data entered.~temp~
#DIV/O!/wgpd/recalcarea~
      {home} {pgdn} {pgdn} {goto} input~/rncyinput~{bs}. {end} {
#DIV/O!{right}/rncxinput~{bs}. {left} {end} {down} {right}~/rncxval
#DIV/O!{right}/rncyest~{bs}. {left} {end} {down} {right}~
#DIV/O!/wgpd/c~.yest~
#DIV/O!{right}/rncxy~{bs}. {left} {left} {left} {end} {down} {right} {1
/c~.xy~
#DIV/O!{home} {pgdn} {goto} n~@count(yinput)~
      {down} {down} @avg(xinput)~

```

```

{down}@avg(yinput)~
{down}@avg(xy)~
{down}{down}+n*@var(xinput)~
{down}+n*@var(yinput)~
Y*X{down}@sum(xy)~
#DIV/0!/wgpe{home}{calc}
/xmmenu~

```

RESULTS:

```

Final          Intermed      Rawdata      Quit
View RegressiView IntermedView Raw DatReturn to Main
{goto}a1~      {goto}a21~    {goto}a41~  {gc{home}/xmme
/xmresults~    /xmresults~  /xmupdown~

```

UPDOWN:

```

Down          Up          Quit
Go Down to NGo Up to PreviReturn to Results Menu.
{pgdn}/xmupd{pgup}/xmupd/wtc/xmresults~

```

GRAPHMENU:

```

Rawdata      Options      View          Quit
Plot Raw Data Set Graph OptiRe-display the Return to Main
/gtxxxvalues~a/xmgraphopt~ /gvq          {home}/xmme
ola{esc}Regre/xmgraphmenu/xmgraphmenu~
falbsq
ts{esc}Raw Data & Regression Line~
qv{esc}{esc}
/xmgraphmenu~

```

GRAPHOPT:

```

Color          B&W          Quit
Show Graphs iShow Graphs iReturn to Graph Menu.
/gocqq        /gobqq        /xmgraphmenu~
/xmgraphopt~ /xmgraphopt~

```

\P:

```

/recopyright_p1~
/xmprint~

```

PALIGN:

/xIAlign Paper then Press ENTER~temp~
/xr

PRINT:

| Results | Data | Quit |
|--------------------------|---------------------------------------------|------------------------------|
| Print Regressic | Print Raw Data | Return to Main Menu. |
| /xcpalign~ | /xcpalign~ | /ccopyright~copyright_p1~/ru |
| /ppra1.e40~cbz{goto}a46~ | {home}/xmmenu~ | |
| /xmprint~ | /ppr{bs}.{right}{right}{right}{right}{end}{ | |
| | cbobra41.e45~qagpq | |
| | /xmprint~ | |

NUMBERCONF:

| No | Yes | NUMBER: |
|-----------------|------------------------------------|------------------|
| Do not erase ar | Erase and resize input area, th/xn | Enter Max. |
| /xminptmenu~ | /xgnumber~ | {goto}temp~{ε |
| | | /xcdefobsnos~ |
| | | /xcdefinputareaz |
| | | /xcdefcalcareaz |
| | | {home}/wgpe |
| | | /xminptmenu~ |

DEFOBSNOS:

| | |
|---------------------------|--------------------------------|
| /reobsnos~/ctemp~f111~ | /reinputarea~/rpinputarea~/cte |
| {goto}f111~{edit}{home}a~ | {goto}h111~{edit}{home}c~ |
| /rncobsnos~a46. | /rncinputarea~b46. |
| a245 | d245 |
| ~/dfobsnos~1~~~/xr | ~/ruinputarea~/xr |

\I:

{esc} {esc} {esc} {esc} {esc}

{esc} {esc} {esc} {esc} {esc}

1~ {home}/ruinputarea~/xminptmenu~

| | | | |
|---------------------|---------------|-----------------------------|------|
| Graph | Print | Agenda | Quit |
| Show Graphs | Print Results | Return to WorlExit to 1-2-3 | |
| /xi@count(e46/xg\P~ | /xmagen~ | /xq | |
| /XGgraph~ | | | |

AGEN:

No Yes

Return to MainExit to Worksheet Selection Agenda.

/xmmenu~ /fragenda~

| | |
|----------------------|---------------------|
| Number | Quit |
| Set Maximum | Return to Main Menu |
| /xmnumbercon/xmmenu~ | |

INPUTINSTR:INPUTINSTR2:

Enter Y-Value:Press Ctrl-Break to Stop.

Enter X-Value:Then Press Alt-M to Get Menu.

/xmmenu~

down}~

ues~{bs} . {end} {down}~

ight} {right}~

| Menu.
nu~

GRAPH:

| Menu.
nu~
{goto}setskip~{down}
@MAX(1,@INT(@COUNT(xvalues)/5))
{calc}~{edit} {home}'~
/XCsetskip~
{home}/XMgraphmenu~

SETSKIP:

/GOSS
1
~QQ/XR

copyright_p1~

down}~

Number of Observations ~temp~

:dit} {home}45+@max(20,@min(2000,@int({end}))) {calc}~

r~

.

DEFCALCAREA:

/recalcarea~/ctemp~j111~

{goto}j111~{edit} {home}e~

/rnccalcarea~d47.

p245

~/xr