SPU 26 Assignment 2 (turned in at lecture, Monday, Sept. $24^{\text {th }}$ )

Your name: $\qquad$
Section time: $\qquad$ TF: $\qquad$

## Hand Measurements

Using the chart on the blackboard, measure the angular width of the following finger configurations with your arm outstretched and enter the results below in both degrees and radians.
Degrees
Radians

One finger
Two fingers

Three fingers
Four fingers
Outstretched pinky to thumb
Fist
Body measurements This is from memory, or measured if necessary. Pleas report height in feet, inches, inseam in inches.

Height $\qquad$ Inseam

Pace measurements This from the course of 100 feet. Take four trials, TF's can help you calculate the results. Find the mean and standard deviation and uncertainty on the mean.

| Speed | Paces per mile | Turnover <br> $(\mathrm{mph})$ |
| :--- | :--- | :--- |

Trial 1
Trial 2
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Trial 3
Trial 4

Mean
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Standard dev.
Uncertainty
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Class information From the class data published, and available on Saturday, use the spreadsheet functions to find and report the following information:

Mean speed (mph) $\qquad$ Std. dev. $\qquad$ Unc. in mean $\qquad$
Mean paces/mile
Std. dev. $\qquad$ Unc. in mean $\qquad$
Mean turnover $\qquad$ Std. dev. $\qquad$ Unc. in mean $\qquad$
Pace length(ft) $\qquad$ Std. dev. $\qquad$ Unc. in mean $\qquad$
Pace length $(\mathrm{ft})=(5280$ feet $/$ mile $* 1 /($ paces $/$ mile $))$
Correlation coefficient of speed and pace length, correlation coefficient of speed and inseam.

Correl. of speed and pace length $\qquad$
Correl. of speed and inseam $\qquad$

SPU 26 Assignment 2 (keep for your own records)
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Section time:
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> Degrees Radians

One finger $\qquad$
$\qquad$
Two fingers $\qquad$
$\qquad$
Three fingers $\qquad$
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Four fingers
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Height $\qquad$ Inseam $\qquad$

Pace measurements This from the course of 100 feet. Take four trials, TF's can help you calculate the results. Find the mean and standard deviation and uncertainty on the mean.

| Speed <br> $(\mathrm{mph})$ | Paces per mile | Turnover <br> $($ paces $/ \mathrm{min})$ |
| :--- | :--- | :--- |

Trial 1
Trial 2

Trial 3

Trial 4

Mean

Standard dev.
Uncertainty
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

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Mean paces/mile
Std. dev. $\qquad$ Unc. in mean $\qquad$
Mean turnover
Std. dev. $\qquad$ Unc. in mean $\qquad$
Correlation coefficient of speed and pace length, correlation coefficient of speed and inseam.

Correl. of speed and pace length $\qquad$
Correl. of speed and inseam $\qquad$

