

## Special Problem 3F

## Female Heptathlon in 2004

The women's heptathlon in the Olympics consists of seven track and field events: the 200m and 800m runs, 100m high hurdles, shot put, javelin, high jump, and long jump. The table below shows the results from the high jump, 800 meter run, and long jump for the 26 women who successfully completed all three events in the 2004 Olympics. Is there a relationship between success at one event and other events?

**Task.** Your assignment is to do whatever you need to investigate this data set and then write a brief article for the newspaper describing your findings and conclusions. Be sure to include in your article: a statement of the problem, the data, and any plots or graphs you construct. Be sure to discuss patterns and trends but also be sure to explain any deviations to the patterns. As part of the assignment, the education editor wants you to predict the high jump height for a heptathlete who runs the 800-m in 136 seconds and predict the long jump height for a heptathlete who has a high jump of 1.75 m.

**Mode.** You may work on this assignment individually, or you may work with one partner (not more than one) in the class.

**Report.** Try to keep graphs and your commentaries about these graphs together on the same page, if possible, so the reader won't have to flip back and forth when reading your report. If you worked with a partner on this Special Problem, then both must contribute equally, and both names must appear on the article. When you write your article, assume that your readers will be reasonably intelligent, but they may not be as statistically literate as you. If you use any technical terms, you may want to briefly explain these terms as part of your story.

**Grading.** The score awarded for this Special Problem will depend on the quality of your analyses, the clarity of your explanations, the appropriateness of your conclusions, and whether you adhered to the general guidelines for Special Problems.

**Deadline.** Special Problem 3F is due on \_\_\_\_\_.

Name	Country	High Jump (m)	800-m (sec)	Long Jump (m)
Carolina Klufft	SWE	1.91	134.15	6.51
Austra Skujyte	LIT	1.76	135.92	6.30
Kelly Sotherton	GBR	1.85	132.27	6.51
Sheila Burrell	USA	1.70	135.32	6.25
Yelena Prokhorova	RUS	1.79	131.31	6.21
Sonja Kesselschlaeger	GER	1.76	135.21	6.42
Marie Collonville	FRA	1.85	133.62	6.19
Natalya Dobrynska	UKR	1.82	137.01	6.23
Margaret Simpson	GHA	1.79	137.72	6.02
Svetlana Sokolova	RUS	1.70	133.23	5.84
J.J. Shobha	IND	1.67	137.28	6.36
Claudia Tonn	GER	1.82	130.77	6.35
Naide Gomes	POR	1.85	140.05	6.10
Michelle Perry	USA	1.70	133.69	6.02
Aryiro Strataki	GRE	1.79	137.90	5.97
Karin Ruchstuhl	NED	1.85	133.95	5.90
Karin Ertl	GER	1.73	138.68	6.03
Kylie Wheeler	AUS	1.79	137.65	6.36
Janice Josephs	RSA	1.70	138.47	6.21
Tiffany Lott Hogan	USA	1.67	145.10	6.15
Magdalena Szczepanska	POL	1.76	133.08	5.98
Irina Naumenko	KAZ	1.79	134.57	6.16
Yuliya Akulenko	UKR	1.73	142.58	6.02
Soma Biswas	IND	1.70	132.27	5.92
Marsha Mark-Baird	TRI	1.70	141.21	6.22
Michaela Hejnova	CZE	1.70	145.68	5.70