



Problem of the Week

Problem B

Citius, Altius, Fortius

Consider the winter Olympic sports of downhill skiing and 1500 metre speed skating, which have recorded numeric results. In the table below are the gold medalist times for men and women in these events in the ten Winter Olympics since 1980 (from the website <https://www.olympic.org/sports>).

Year	Downhill Skiing		Speed Skating	
	Men	Women	Men	Women
1980	1:45.50	1:37.52	1:55.44	2:10.95
1984	1:45.59	1:13.36	1:58.36	2:03.42
1988	1:59.63	1:25.86	1:52.06	2:00.68
1992	1:50.37	1:52.55	1:54.81	2:05.87
1994	1:45.75	1:35.93	1:51.29	2:02.19
1998	1:50.11	1:28.89	1:47.87	1:57.58
2002	1:39.13	1:39.56	1:43.95	1:54.02
2006	1:48.80	1:56.49	1:45.97	1:55.27
2010	1:54.31	1:44.19	1:45.57	1:56.89
2014	2:06.23	1:41.57	1:45.006	1:53.51

- How many times has the winning time improved in each sport from one Olympics to the next, and what was the greatest improvement?
- How much faster is the most recent record-breaking time than the 1980 winning time for each sport? Who achieved this fastest time?
- Create two graphs (one for each sport) of the winning times over these ten Winter Olympics. Use whichever type of graph you think will best display the data.

STRANDS DATA MANAGEMENT AND PROBABILITY, NUMBER SENSE AND NUMERATION

