## EMPIRE STATE BUILDING Run-up Race: www.esbnyc.com

An exciting tradition at the Empire State Building is an annual race up the 1576 steps—approximately 1/5 mile—of the internal staircases to the 86th floor of the observatory. The Run-Up has been held each year since 1978, when it was first won by NYC firefighter Gary Muhrcke and Marcy Schwamm. Runners in the invitation-only event are selected based on previous performance or other athletic achievements.

NAMF

Use the table below to complete the following mathematics problems:

## WINNING TIMES FOR 2007:

Official Finish List - Male		Age		Time
1	Thomas Dold	22	Germany	10:25
2	Jahn Mattias	23	Germany	10:56
3	Rickey Gates	25	CO	11:02
4	Pedro Ribeiro	34	China	11:10
5	Rudolf Reitberger	35	Austria	11:12
6	Tommy Coleman	32	CA	11:33
7	Jesse Berg	34	IL	12:02
8	David Shafran	27	IL	12:14
9	Zach Schade	39	WA	12:15
10	Jose Cano Fernandez	36	Spain	12:22

Official Finish List - Female		Age		Time
1	Suzy Walsham	33	Singapore	13:12
2	Cindy Moll-Harris	38	IN	13:24
3	Fiona Bayly	39	NY	13:25
4	Amy Fredericks	40	СТ	14:07
5	Kathryn Froelich	44	IL	14:18
6	Caroline Gaynor	23	NY	14:29
7	Bridget Carlson	45	IL	14:30
8	Tina Marie Poulin	34	NY	14:38
	Stacy Creamer	47	NY	14:45
10	Jodi Gravino	37	NY	15:34

1. How many seconds did it take the fastest competitor to run to the top? How much faster was he than the slowest competitor?

2. Determine the mean, median, mode, and range for all twenty competitors; just for the 10 male competitors; just for the 10 female competitors.

3. Create a graph representing ages and corresponding times for all 20 competitors. Consider how you can represent the gender of the competitor on the graph.

represent these differences in a graph.

5. The original elevators traveled at 1200 ft/min. How much faster are the newer high speed elevators?

4. The elevator in the Empire State Building can travel to the Observatory in 20 seconds. How much faster is the elevator than each of the runners in the race? Also



